English- Day 7

Grade 4

Concept: writing an opinion essay
Following a step by step process to write an opinion essay
Following an established set of criteria to write an opinion essay

State Academic Standard:

4.5.2 Write responses to literature that:
- demonstrate an understanding of a literary work.
- support judgments through references to both the text and prior knowledge.
Example: Write a description of a favorite character in a book. Include examples from the book to show why this character is such a favorite.

4.5.6 Write for different purposes (information, persuasion) and to a specific audience or person.
Example: Write a persuasive report for your class about your hobby or interest. Use charts or pictures, when appropriate, to help motivate your audience to take up your hobby or interest.

4.6.3 Create interesting sentences by using words that describe, explain, or provide additional details and connections, such as adjectives, adverbs, appositives, participial phrases, prepositional phrases, and conjunctions.
- Adjectives: brown eyes, younger sisters
- Adverbs: We walked slowly.
- Appositives: noun phrases that function as adjectives, such as We played the Cougars, the team from Newport.
- Participial phrases: verb phrases that function as adjectives, such as The man walking down the street saw the delivery truck.
- Prepositional phrases: in the field, across the room, over the fence
- Conjunctions: and, or, but

Objective: After writing a shared class opinion essay, the students will be able to choose an opinion, decide upon reasons for and against the opinion and compose an individual opinion essay.

Materials List: overhead projector
Overhead pen
Shared opinion essay writing
Writing journals
Pencils
What Makes a Great Opinion Essay chart

Engagement: “For the past two days we have been writing an opinion essay about the book, Passage to Freedom: The Sugihara Story. Now it is your turn to write an essay
based on the book you are reading for literature circles. Before we begin our assignment, let’s recall the steps we took as a class to write our essay. Who can remember what we did first, even before we began to write our introduction paragraph?” With the students the teacher will write out the steps for writing an opinion essay prominently on the board.

1. Write opinion
2. Brainstorm reasons for and against the opinion
3. Look at each reason- cross out the weak reasons
4. Write introduction paragraph- make it interesting!
5. Write a paragraph about each reason- make sure to include details and examples!
   You must write about at least 3 reasons.
6. Write conclusion paragraph which sums up the opinion and the reasons, not the details.

“For our essay the opinion was: We would like to be friends with Hiroki Sugihara’s father. Think of a character in the book you are reading for literature circles. It doesn’t have to be the main character but it needs to be a character that you know a lot about. Even though we are not yet done reading our books, we are going to decide whether we want to be friends or not based on what we know about the character so far. Your opinion will be one of these sentences.” The teacher will write the following sentences on the board and verbalize them to students.

I would like to be friends with (character’s name).
I would not like to be friends with (character’s name).

“That sentence will be your opinion. Why will that sentence be an opinion?”

**Exploration/Explanation:** The students will open their writing journals. The teacher will tell the students to use one page in their journal for the pre-writing activities, numbers 1-3, and another page to start writing their essay. Allow the students to sign up for writing conferences if they need assistance with any step of the pre-writing or drafting stages of the writing process. The teacher will conduct writing conferences during this time. If no writing conferences are deemed necessary, the teacher will circulate throughout the room observing students’ work and identifying possible students to conference with tomorrow about their essays. Remind students frequently to look at the *What Makes a Great Opinion Essay* chart as they are writing.

**Evaluation:** The final drafts will be collected at the end of next week as a means of formal assessment. The teacher will be informally assessing students’ writing skills and understanding of an opinion essay through conferencing and general observations during the writing workshop.

**Gearing up:** If the students need to be challenged or if a small group of students needs to be challenged, ask them to include direct quotations from their novel as examples.

**Gearing down:** If the students have trouble getting started allow them to group together with their literature circle groups. Have each literature circle discuss ways they could introduce the topic in an interesting way for the introduction paragraph. The teacher will move from group to group to assist. Most other problems can be addressed in individual writing conferences.
English- Day 8

Grade 4

Concept: writing an opinion essay
Following a step by step process to write an opinion essay
Following an established set of criteria to write an opinion essay

State Academic Standard:
4.5.2 Write responses to literature that:
   - demonstrate an understanding of a literary work.
   - support judgments through references to both the text and prior knowledge.
   Example: Write a description of a favorite character in a book. Include examples from the book to show why this character is such a favorite.

4.5.6 Write for different purposes (information, persuasion) and to a specific audience or person.
   Example: Write a persuasive report for your class about your hobby or interest. Use charts or pictures, when appropriate, to help motivate your audience to take up your hobby or interest.

4.6.3 Create interesting sentences by using words that describe, explain, or provide additional details and connections, such as adjectives, adverbs, appositives, participial phrases, prepositional phrases, and conjunctions.
   - Adjectives: brown eyes, younger sisters
   - Adverbs: We walked slowly.
   - Appositives: noun phrases that function as adjectives, such as We played the Cougars, the team from Newport.
   - Participial phrases: verb phrases that function as adjectives, such as The man walking down the street saw the delivery truck.
   - Prepositional phrases: in the field, across the room, over the fence
   - Conjunctions: and, or, but

Objective: After writing a shared class opinion essay, the students will be able to choose an opinion, decide upon reasons for and against the opinion and compose an individual opinion essay.

Materials List: overhead projector
   Overhead pen
   Writing journals
   Pencils
   What Makes a Great Opinion Essay chart
   Class writing conference sign up chart

Engagement: Ask students to open their writing journals to their pre-writing page from the previous day. Ask students to share with the person sitting next to them the opinion
they have decided to write on. As a whole class allow several students to share their opinion. Then to gauge where each student is in the pre-writing and drafting process, ask students to look at the six steps for writing an opinion essay outlined in day seven’s lesson. Ask the students to silently read through each step and recall what they completed yesterday. Then ask students who are currently working on step one, which is forming an opinion, to raise their hand. Ask students who are currently on step two, which is listing reasons for and against, to raise their hands. Continue until all students have been accounted for. This will give the teacher an idea of where the class is in the writing process. Ask students where they could look in the classroom to make sure their opinion essay followed the criteria of a great essay. Remind students to use the What Makes a Great Opinion Essay chart throughout the writing process.

**Exploration/Explanation:** The teacher will then ask any students who wish to have a writing conference with the teacher to sign up on the class chart. The students will then be asked to proceed with their opinion essay writing. The teacher will conduct writing conferences with students desiring them to assist with the writing process. The teacher will also conduct writing conferences with students who appear to be struggling or are stuck on a particular step. If the teacher is not holding writing conferences with students, the teacher will walk around the room observing students’ work, identifying potential class-wide problems that need to be addressed and assisting as necessary.

**Evaluation:** The final drafts will be collected at the end of next week as a means of formal assessment. The teacher will be informally assessing students’ writing skills and understanding of an opinion essay through conferencing and general observations during the writing workshop.

**Gearing up:** If the students need to be challenged or if a small group of students needs to be challenged, ask them to include direct quotations from their novel as examples.

**Gearing down:** Most problems will be addressed in individual writing conferences. However if the teacher notices the majority of students have problem with a specific aspect, such as evaluating reasons to determine if they are strong or weak, the teacher will stop the essay writing and conduct a mini-lesson on the concept.
English- Day 9

Grade 4

Concept: writing an opinion essay
Following a step by step process to write an opinion essay
Following an established set of criteria to write an opinion essay

State Academic Standard:
4.5.2 Write responses to literature that:
- demonstrate an understanding of a literary work.
- support judgments through references to both the text and prior knowledge.
Example: Write a description of a favorite character in a book. Include examples from the book to show why this character is such a favorite.

4.5.6 Write for different purposes (information, persuasion) and to a specific audience or person.
Example: Write a persuasive report for your class about your hobby or interest. Use charts or pictures, when appropriate, to help motivate your audience to take up your hobby or interest.

4.6.3 Create interesting sentences by using words that describe, explain, or provide additional details and connections, such as adjectives, adverbs, appositives, participial phrases, prepositional phrases, and conjunctions.
Adjectives: brown eyes, younger sisters
Adverbs: We walked slowly.
Appositives: noun phrases that function as adjectives, such as We played the Cougars, the team from Newport.
Participial phrases: verb phrases that function as adjectives, such as The man walking down the street saw the delivery truck.
Prepositional phrases: in the field, across the room, over the fence
Conjunctions: and, or, but

Objective: After writing a shared class opinion essay, the students will be able to choose an opinion, decide upon reasons for and against the opinion and compose an individual opinion essay.

Materials List: overhead projector
Overhead pen
Writing journals
Pencils
What Makes a Great Opinion Essay chart
Class writing conference sign up chart

Engagement: Ask students to open their writing journals to their opinion essay. To gauge where each student is in the pre-writing and drafting process, ask students to look
at the six steps for writing an opinion essay outlined in day seven’s lesson. Ask the students to silently read through each step and recall what they completed yesterday. Then ask students who are currently working on step one, which is forming an opinion, to raise their hand. Ask students who are currently on step two, which is listing reasons for and against, to raise their hands. Continue until all students have been accounted for. This will give the teacher an idea of where the class is in the writing process. Ask students where they could look in the classroom to make sure their opinion essay followed the criteria of a great essay. Remind students to use the *What Makes a Great Opinion Essay* chart throughout the writing process. Also tell students that this is the last day they will have to work on their essays in class. If the rough drafts are not completed they will be sent home to be finished as homework.

**Exploration/Explanation:** The teacher will then ask any students who wish to have a writing conference with the teacher to sign up on the class chart. The students will then be asked to proceed with their opinion essay writing. The teacher will conduct writing conferences with students desiring them to assist with the writing process. The teacher will also conduct writing conferences with students who appear to be struggling or are stuck on a particular step. If the teacher is not holding writing conferences with students, the teacher will walk around the room observing students’ work, identifying potential class-wide problems that need to be addressed and assisting as necessary.

**Evaluation:** The teacher will collect the finished rough drafts from students to read as an informal means of assessment. A grade will not be taken but the students will receive points on the final evaluation rubric for completing their rough draft. The final drafts will be collected at the end of next week as a means of formal assessment. The teacher will be informally assessing students’ writing skills and understanding of an opinion essay through conferencing and general observations during the writing workshop.

**Gearing up:** If the students need to be challenged or if a small group of students needs to be challenged, ask them to include direct quotations from their novel as examples.

**Gearing down:** Most problems will be addressed in individual writing conferences. However if the teacher notices the majority of students have problem with a specific aspect, such as evaluating reasons to determine if they are strong or weak, the teacher will stop the essay writing and conduct a mini-lesson on the concept.
English- Day 10

Grade 4

Concept: revising students’ work
Using varied words in writing

State Academic Standard:
4.4.10 Review, evaluate, and revise writing for meaning and clarity.
4.5.2 Write responses to literature that:
    demonstrate an understanding of a literary work.
    support judgments through references to both the text and prior knowledge.
Example: Write a description of a favorite character in a book. Include examples from the
book to show why this character is such a favorite.
4.5.5 Use varied word choices to make writing interesting.
Example: Write stories using descriptive words in place of common words;
for instance, use enormous, gigantic, or giant for the word big.
4.5.6 Write for different purposes (information, persuasion) and to a specific
    audience or person.
Example: Write a persuasive report for your class about your hobby or
interest. Use charts or pictures, when appropriate, to help motivate your
audience to take up your hobby or interest.
4.6.3 Create interesting sentences by using words that describe, explain, or provide
    additional details and connections, such as adjectives, adverbs, appositives,
    participial phrases, prepositional phrases, and conjunctions.
Adjectives: brown eyes, younger sisters
Adverbs: We walked slowly.
Appositives: noun phrases that function as adjectives, such as We played the Cougars, the team from Newport.
Participial phrases: verb phrases that function as adjectives, such as The man walking down the street saw the delivery truck.
Prepositional phrases: in the field, across the room, over the fence
Conjunctions: and, or, but

Objective: Using an editing checklist the students will be able to revise the class opinion
essay and then individually revise their own opinion essay.
After teacher modeling, the students will be able to find commonly used words in their
writing and replace them with more interesting synonyms.

Materials List: overhead projector
Overhead pen
Class written opinion essay
Students’ rough drafts
Engagement: The teacher will write the following two sentences on the overhead.
The little boy cried loudly when his blue ball went into the street.
The tiny boy cried hysterically when his blue striped ball bounced into the street.
Have a student volunteer read each sentence out loud. Then ask students which sentence
is more interesting, which sentence is more detailed and provides more information and
why. Ask students to find the changed words in the second sentence. Circle them as the
students identify them. Ask students what the difference is between loudly and
hysterically. Hysterically tells us exactly how the baby was crying. Ask the students what
the difference between little and tiny is. Tiny tells us that the boy is not just small but he
is probably very small for his age. The teacher will ask the students if small would have
been a good word to use instead of little. Why not? Small is still not very interesting or
specific. It means the exact same thing as little! Tell students, “Today we are going to
look at the essay we wrote as a class and see if there are any words we could change to
make them more interesting, detailed and specific.”

Exploration/Explanation: The teacher will place the shared opinion essay on the
overhead and begin reading it. After reading the first couple of sentences, the teacher will
stop and think aloud, “After re-reading the first sentences I don’t think the word ______
is very interesting or specific. Instead I will use the word _______.” The teacher will
replace it with a more interesting and specific word by crossing out the first word and
writing the new word above it. The teacher will then invite the students to look for other
words to change as the essay is read aloud. When the students think a word should be
changed, they will raise their hands and the teacher will call upon a student. The students
will then brainstorm other words to replace the chosen word. The teacher will help guide
students to pick words that are more exact and interesting. The teacher will write the new
words in the essay as done with the first word. This pattern will continue until the entire
essay has been read and the students have changed at least four or five words. “Now it is
your turn to look at your own essay. Re-read it carefully and change words that are not
very interesting or specific. Cross out the first word you wrote and rewrite the new word
above it. Everyone must change at least three words in their essay.” The teacher will then
hand back the rough drafts to students. The students will work independently to vary their
word choice in their essays. While the students are working, the teacher will walk around
and observe students’ work. The teacher will assist students and provide more modeling
for students having trouble either identifying words to be changed or choosing more
specific words to replace with.

Evaluation: The teacher will collect the students’ rough drafts when they are done to
informally assess students’ work. A grade will not be taken but the students will receive
points on the final evaluation rubric for changing at least three words to more interesting
and/or specific, detailed words. The final drafts will be collected at the end of next week
as a means of formal assessment.

Gearing up: If the students need to be challenged or if a small group of students needs to
be challenged, invite them to use a thesaurus to find new or unusual words to use in their
essays to replace commonly used words. The students must also look up the definitions of these words, however, so they are not using unknown words in their writing.

**Gearing down:** If the students appear to be having trouble with either the identification of words to change or actually choosing better words, the teacher will continue to model with the shared piece of writing rather than asking the students to find words. If individual students have trouble during independent work time, the teacher will work with those students providing additional modeling, as well as guiding them to find words in their own writing to change.
Grade 4

Concept: revision of students’ writing to improve meaning
Using a checklist

State Academic Standard:
4.4.10 Review, evaluate, and revise writing for meaning and clarity.
4.5.2 Write responses to literature that:
demonstrate an understanding of a literary work.
support judgments through references to both the text and prior knowledge.
Example: Write a description of a favorite character in a book. Include examples from the book to show why this character is such a favorite.
4.5.6 Write for different purposes (information, persuasion) and to a specific audience or person.
Example: Write a persuasive report for your class about your hobby or interest. Use charts or pictures, when appropriate, to help motivate your audience to take up your hobby or interest.
4.6.3 Create interesting sentences by using words that describe, explain, or provide additional details and connections, such as adjectives, adverbs, appositives, participial phrases, prepositional phrases, and conjunctions.
Adjectives: brown eyes, younger sisters
Adverbs: We walked slowly.
Appositives: noun phrases that function as adjectives, such as We played the Cougars, the team from Newport.
Participial phrases: verb phrases that function as adjectives, such as The man walking down the street saw the delivery truck.
Prepositional phrases: in the field, across the room, over the fence
Conjunctions: and, or, but

Objective: After revising the class written opinion essay, the students will be able to revise their opinion essays using a revision checklist.

Materials List: overhead projector
Overhead pens
Revision checklist
Students’ rough drafts
Shared opinion essay
Red pens

Engagement: “Yesterday we revised our opinion essays by choosing words that were more interesting and more specific. Today we are going to revise our own essays using a
checklist. First, let’s take a look at the checklist. Each of the things listed on the checklist are very important for a great opinion essay.” Read through the checklist with the class, reminding students that they have seen these before.

**Exploration/Explanation:** Then place the class opinion essay on the overhead. Model reading the first paragraph and then reading the first line on the checklist, interesting opening. Think aloud that the opening is interesting but that it could be made more interesting. Check the no box because it needs to be fixed later. Model going through each of the lines on the checklist, checking either yes or no. When completed go back to the no statements and make corrections with the students’ help and input. Tell students that they will first read their essay and mark yes or no next to each line on the checklist indicating whether it was done or not. They will then revise anything with a no next to it with a red pen and make any other changes that will make the essay a great opinion essay. Remind students that the point of the revision process is to make changes to a piece of writing to improve its meaning, to make it more understandable to the reader. Pass back the students’ rough drafts and give each student a checklist. The teacher will walk around the room as the students evaluate their work to observe students and informally assess their use of a checklist and the revision process. The teacher will also work with students needing assistance with the revision process.

**Evaluation:** The teacher will informally assess students’ revisions while circulating throughout the room. The final copy will be collected at the end of the week as a means of formal assessment.

**Gearing up:** If the students revise their essays well with the use of the checklist and additional time remains, place the students in pairs. Have each student read his/her essay to his/her partner. Have the partner make comments, at least two positive to begin with and then make suggestions as to how the writer could improve.

**Gearing down:** If individual students have trouble making revisions using the checklist the teacher will work individually with those students or in a small group, walking the students through the checklist. For example, the teacher would read the first line on the checklist and ask students to read their introductions and tell the teacher whether or not they believe their introduction is interesting and draws the reader in. The teacher will ask the students to explain why they think it is a good introduction or why they do not think it is a good introduction. The teacher will work through each line on the checklist in this manner helping students identify the aspects of their essay that correspond to each. If the entire class has trouble revising using the checklist, the teacher will walk through the checklist one line at a time with the entire class as outlined above for a small group.
Opinion Essay Revision Checklist

- Is my introduction interesting? Does it make my reader want to continue reading my essay?
  
  YES _________  NO _________

- Is my opinion in the first paragraph?
  
  YES _________  NO _________

- Do I have a topic sentence for each of my paragraphs?
  
  YES _________  NO _________

- Are all of my reasons strong reasons, not weak ones?
  
  YES _________  NO _________

* Do I have details for each of my reasons?
  
  YES _________  NO _________

- Did I include my opinion and reasons in my last paragraph?
  
  YES _________  NO _________
English- Day 12

Grade 4

Concept: editing students’ essays using an editing checklist

State Academic Standard:

4.4.11 Proofread one’s own writing, as well as that of others, using an editing checklist or set of rules, with specific examples of corrections of frequent errors.

4.5.2 Write responses to literature that:
- demonstrate an understanding of a literary work.
- support judgments through references to both the text and prior knowledge.

Example: Write a description of a favorite character in a book. Include examples from the book to show why this character is such a favorite.

4.5.6 Write for different purposes (information, persuasion) and to a specific audience or person.
- Example: Write a persuasive report for your class about your hobby or interest. Use charts or pictures, when appropriate, to help motivate your audience to take up your hobby or interest.

Objective: Working with a partner, the students will be able to use an editing checklist to correct grammatical errors in opinion essays.

Materials List: overhead projector
- Overhead markers
- Class written opinion essay
- Editing checklists for students
- Red pens
- Students’ rough drafts

Engagement: “Yesterday we revised our essays to make them more understandable for our readers. What is the last step in the writing process before we can write our final drafts?” “Yes, now it is time to edit our papers. What did we use yesterday to help us revise our papers?” A checklist. “Today we are going to use another checklist. It is going to look a lot like the one yesterday but this one will be for editing.” Hand the editing checklist out to students. Put the class opinion essay on the overhead. Ask a student to read the first item on the checklist. The teacher will model checking for that first item, did I indent all paragraphs? The teacher will check each paragraph, verify that it is indented and then check yes when it is done. “Make sure that each correction is made before checking it off and moving onto the next thing on the list. Today you will be working in pairs. Together the two of you will look over both rough drafts, make necessary corrections with a red pen and check off each item as it is completed. Those groups that are off task or too loud will go back to their seats and complete editing without a partner.”
**Exploration/Explanation:** Have the students take out their rough drafts and the teacher will pair the students up. The teacher will walk around as the students work together to proofread and edit their papers. The teacher will move around and take turns sitting in on the pairs to listen and observe their teamwork and editing skills. The teacher will make sure all students are on task and will monitor student behavior.

**Evaluation:** The teacher will collect all rough drafts after they are edited. The teacher will review all editing done, will correct any words that are still misspelled and return the papers to students tomorrow. The teacher will be informally assessing students’ proofreading abilities through observation and through collected rough drafts. The students’ final drafts will be collected at the end of the week to be formally assessed.

**Gearing up:** If the students make all corrections to both sets of rough drafts, the teacher will ask the students to bring their rough drafts to the teacher for final editing of spelling. The students will then be allowed to begin typing their final drafts on the classroom computers. Remind students to incorporate all revisions and editing changes into their final copy.

**Gearing down:** If the students are unable to work cooperatively with their partners, they will be asked to return to their desks to work alone. If the students are having trouble identifying editing errors in their writing, the teacher will stop all partners and ask them to return to their seats. The teacher will then conduct a short mini-lesson on the importance of carefully reading the essay while editing. The teacher will write a quick paragraph with several spelling errors. The teacher will say that she/he is checking for spelling mistakes. The teacher will model quickly going through the paragraph making minimal changes and then pronouncing completion. The teacher will ask the students what was done incorrectly and will then emphasize the importance of carefully checking for editing errors.
Editing Checklist

Check each item off after editing it in your essay.

_____ Indent all paragraphs
_____ Correct all run-on sentences
_____ Write contractions correctly
_____ Correct all spelling errors
Grade 4

**Concept:** typing final drafts of opinion essays

**State Academic Standard:**

4.4.9 Use a computer to draft, revise, and publish writing, demonstrating basic keyboarding skills and familiarity with common computer terminology.

**Objective:** The students will be able to generate a final copy of their opinion essay using the computer and incorporating revision and editing corrections.

**Materials List:** computer for each student
Students’ rough drafts

**Engagement:** “We have worked so hard for the past two weeks on our opinion essays. Now we are finally ready to create our final drafts. Today we are going to the computer lab to type our final copies!” Take the students to the computer lab with their rough drafts in hand.

**Exploration/Explanation:** Once in the computer lab explain to students that they will have two days to type their final copies. Allow the students to type their final copies, reminding students to include the revision and editing changes to their papers that are written in red pen. The teacher will walk around the computer lab to monitor student behavior, assist as necessary and to make sure students are incorporating their revision and editing corrections.

**Evaluation:** The students’ final draft essays will be formally evaluated using a rubric.

**Gearing up:** If the students accurately type their essays in one day, tomorrow will be set aside for students to share their essays with the class from the author’s chair.

**Gearing down:** If the students have trouble typing their essays while incorporating the necessary changes, the teacher will model for the students reading what a student has written on their paper and then typing what was read. The teacher will draw the students’ attention to the typed sentence with the corrections made. If individual students have trouble incorporating the corrections while typing, the teacher will assist those students individually or allow students already finished typing to assist students who need help.
Grade 4

Concept: typing final drafts of opinion essays

State Academic Standard:
4.4.9 Use a computer to draft, revise, and publish writing, demonstrating basic keyboarding skills and familiarity with common computer terminology.

Objective: The students will be able to generate a final copy of their opinion essay using the computer and incorporating revision and editing corrections.

Materials List: computer for each student
Students’ rough drafts

Engagement: “Yesterday we worked in the computer lab to type the final copies of our opinion essays. Today we will have one last day in the lab to finish up!”

Exploration/Explanation: Allow the students to type their final copies, reminding students to include the revision and editing changes to their papers that are written in red pen. The teacher will walk around the computer lab to monitor student behavior, assist as necessary and to ensure students are incorporating their revision and editing corrections.

Evaluation: The students’ final drafts, rough drafts and pre-writing will be turned into the teacher upon completion and printing to be evaluated by the attached rubric as a means of formal assessment.

Gearing up: If time allows after the students have finished typing their final copies, students desiring to share will be allowed to read their opinion essays to the class from the author’s chair.

Gearing down: If the students have trouble typing their essays while incorporating the necessary changes, the teacher will model for the students reading what a student has written on their paper and then typing what was read. The teacher will draw the students’ attention to the typed sentence with the corrections made. If individual students have trouble incorporating the corrections while typing, the teacher will assist those students individually or allow students already finished typing to assist students who need help.
# Opinion Essay Rubric

<table>
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<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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</thead>
<tbody>
<tr>
<td><strong>Introduction</strong></td>
<td>Opinion stated</td>
<td>Opinion is stated in correct format but not in the introduction paragraph</td>
<td>Opinion is stated, in the correct format and is in introduction paragraph</td>
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<tr>
<td></td>
<td>No opinion</td>
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<td>is stated</td>
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<tr>
<td><strong>Introduction</strong></td>
<td>Introduction paragraph is missing</td>
<td>Introduction does not draw the reader in, opinion is just stated</td>
<td>Interesting introduction, draws the reader in but does not use a story or specific example</td>
<td>Interesting introduction, draws the reader in through the use of a story or a specific example</td>
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<tr>
<td><strong>Body</strong></td>
<td>Reasons</td>
<td>No reasons are stated</td>
<td>Only one strong reason is included</td>
<td>3 strong reasons are used, all are either for or against</td>
<td>4 strong reasons are used, at least one is against the opinion</td>
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<tr>
<td><strong>Topic Sentences</strong></td>
<td>No topic sentences</td>
<td>Not all body paragraphs have topic sentences</td>
<td>Each paragraph has a topic sentence but does not go with the paragraph</td>
<td>Each body paragraph has a topic sentence which introduces the reason</td>
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<tr>
<td><strong>Details</strong></td>
<td>No details are given for any of the reasons</td>
<td>Only one detail is given for each reason</td>
<td>Only two details are given for each reason, details are developed and go with the reason</td>
<td>Three good details are given for each reason, details are developed, interesting, go with the reason</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Conclusion</strong></td>
<td>Conclusion paragraph is missing or does not sum up the essay</td>
<td>Conclusion paragraph does not include both the opinion and the reasons</td>
<td>Conclusion paragraph includes opinion, reasons and some details</td>
<td>Conclusion paragraph sums up by restating the opinion and reasons, not the details</td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------</td>
<td>---------------------------------------------------------------</td>
<td>---------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------</td>
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<td></td>
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<tr>
<td><strong>Revision</strong></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Checklist</td>
<td>Not done</td>
<td>Not all completed</td>
<td>Entirely completed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Word Revision</td>
<td>No words were changed or the words were not changed to more interesting or specific words</td>
<td>Only 1 word was changed to a more interesting or specific word</td>
<td>Only 2 words were changed to more interesting and specific words</td>
<td>More than 3 words were changed, only 3 were changed to more interesting or specific words</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Revision</strong></td>
<td>Revision was not done</td>
<td>Minimal revision was done, amount completed is unacceptable</td>
<td>Revision was completed, more corrections could have been made to make the paper better</td>
<td>Revision was complete, student made many corrections to better the paper</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Editing</strong></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Checklist</td>
<td>Not done</td>
<td>Not entirely completed</td>
<td>Entirely completed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Errors</td>
<td>5-6 spelling errors before teacher revision</td>
<td>3-4 spelling errors before teacher revision</td>
<td>1-2 spelling errors before teacher revision</td>
<td>No spelling errors before teacher revision</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Typing</td>
<td>More than 4 typing errors</td>
<td>Between 2-4 typing errors</td>
<td>Less than 2 typing errors</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Requirements</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Rough Draft</td>
<td>Not turned in</td>
<td>Turned in</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Pre-writing</td>
<td>Not turned in</td>
<td>Turned in</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Student Name:**

**Teacher Comments:**
Math- Day 1

Grade 4

Concept: measuring lengths of objects to the nearest \( \frac{1}{4} \) and \( \frac{1}{8} \) inch

State Academic Standards:
4.5.1 Measure length to the nearest quarter-inch, eighth-inch, and millimeter.
   Example: Measure the width of a sheet of paper to the nearest millimeter.
4.6.1 Represent data on a number line and in tables, including frequency tables.
   Example: The students in your class are growing plants in various parts of the classroom. Plan a survey to measure the height of each plant in centimeters on a certain day. Record your survey results on a line plot.

Objectives: The students will be able to measure the lengths of varying numbers of snap cubes to the nearest \( \frac{1}{4} \) and \( \frac{1}{8} \) inches.

Prerequisite Knowledge: how to use a ruler
Knowledge of fractions \( \frac{1}{2}, \frac{1}{4} \) and \( \frac{1}{8} \)

Materials List: rulers
Snap cubes
Overhead projector
Overhead markers
Overhead ruler
Overhead cubes, equivalent size to snap cubes
Tack
Large paperclip
Worksheets
Pencils

Engagement: “We are beginning a three week study today during which we will be measuring, and drawing scale pictures. Raise your hand if you have ever moved to a new house. Before you move, what do your parents have to do to make sure all of the furniture will fit?” (Measure) “Today we are going to practice our measurement skills.”

Exploration/Explanation: The teacher will pass out snap cubes and a ruler to each student. Before the math manipulatives are handed out, the teacher will review manipulative use guidelines. The teacher will place the overhead ruler on the overhead, asking students to place their ruler in front of them. The teacher will point to the one inch mark and will ask students to place their finger on the one inch mark on their rulers. “The distance from the beginning of the ruler to the one inch mark is one inch.” The teacher will then point out the \( \frac{1}{2} \) inch mark, asking students to put their finger on the \( \frac{1}{2} \) inch mark. “How many \( \frac{1}{2} \) inches are in one inch?” (Two) The teacher will then ask the students to place their finger on the \( \frac{1}{4} \) inch mark, then the \( \frac{1}{2} \) inch mark, the \( \frac{3}{4} \) inch mark and the 1 inch mark. Above the \( \frac{1}{2} \) inch mark the teacher will also write 2/4. “How
many ¼ inches are there in one inch?” (Four) “How do you know?” (The bottom number is a four, so that means that the inch has been divided into four equal parts.) The teacher will then place an object, such as a tack, on the overhead. The teacher will model placing the object at the end of the ruler. The teacher will then ask the students if the other end of the tack is closer to the ¼ inch or 1 inch. “When measuring to the nearest ¼ inch, we choose the ¼ that is closest to the object. Sometimes the object will be exactly ¼ inch but many times you will have to choose the closest number.” The teacher will then model with another object, a big paperclip, demonstrating to students the measurement of an object that is exactly a ¼ inch increment, 1 ¼ inches. The teacher will then place three snap cubes on the overhead, instructing students to also put together three snap cubes and lay them on the desk. The students will measure the length of the three snap cubes to the nearest ¼ inch. The teacher will walk around to assist students and to informally assess student comprehension. If the students do not yet appear to understand, the teacher will model the measurement of the three snap cubes on the overhead and will then ask students to measure the length of four snap cubes before moving on. If students appear to understand, the teacher will then follow the same procedures as above for 1/8 inch increments. The teacher will use the tack and large paperclip as models once again. The teacher will also ask students to measure the length of three snap cubes to the nearest 1/8 inch. “Is ¼ inch bigger or is 1/8 inch bigger?” (1/4 inch) “How do you know?” (An inch is divided into 4 equal parts for ¼ inch but divided into 8 equal parts for 1/8 inch. The 8 parts are smaller than the 4 parts.” “Which measurement would I use, to the nearest ¼ inch or the nearest 1/8 inch if I wanted to be more accurate, if I wanted to be as close as possible to the exact length?” (1/8 inch) “Why?” (1/8 is a smaller increment and so you can get closer to the actual measurement.)

**Evaluation:** The students will then be given a worksheet to complete in class with a partner. The students will put together different numbers of snap cubes and measure them to the nearest ¼ and 1/8 inch.

**Gearing Up:** If the students grasp the concept quickly and accurately, I will introduce the millimeter, as it is also a fourth grade measurement standard.

**Gearing Down:** If the students appear to have difficulty measuring to the nearest ¼ inch and/or 1/8 inch, we will do the evaluation worksheet together until the teacher feels that the students are ready to work in partners.
Directions: Put together the number of snap cubes listed in the first column. Lay them flat on your desk. Measure the length to the nearest ¼ inch. Record your answer in the second column. Measure the length to the nearest 1/8 inch. Record your answer in the third column.

<table>
<thead>
<tr>
<th>Number of Snap Cubes</th>
<th>Length to the nearest ¼ inch</th>
<th>Length to the nearest 1/8 inch</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 snap cube</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 snap cubes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 snap cubes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 snap cubes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 snap cubes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 snap cubes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 snap cubes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 snap cubes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 snap cubes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Math Lesson- Day 2

Grade: 4

Concept: measuring lengths and widths of classroom objects to the nearest $\frac{1}{4}$ and $\frac{1}{8}$ inches

State Academic Standards:
4.5.1 Measure length to the nearest quarter-inch, eighth-inch, and millimeter.
   Example: Measure the width of a sheet of paper to the nearest millimeter.
4.6.1 Represent data on a number line and in tables, including frequency tables.
   Example: The students in your class are growing plants in various parts of the classroom. Plan a survey to measure the height of each plant in centimeters on a certain day. Record your survey results on a line plot.

Objectives: The students will be able to accurately measure the length and width of classroom objects to the nearest $\frac{1}{4}$ and $\frac{1}{8}$ inch with a ruler.

Prerequisite Knowledge:
Use of a ruler
Measurement to the nearest $\frac{1}{4}$ and $\frac{1}{8}$ inches
Recording data in a table

Materials List: overhead projector
Overhead markers
Overhead ruler
Overhead snap cubes
Worksheets
Homework papers
Rulers
Pencils
Math textbooks, literature circle books, assignment notebooks
Objects in classroom for students to measure such as: Student desk, bookcase, overhead projector, trash can, electronic pencil sharpener, student chair, carpet square, homework tray, teacher’s desk, sink, telephone, small group table, fish tank or other animal cage, printer, small dry erase board

Engagement: “Yesterday we learned how to measure items to the nearest $\frac{1}{4}$ and $\frac{1}{8}$ inches. Today we are going to practice our measurement skills in the classroom.” The teacher will briefly review measuring to the nearest $\frac{1}{4}$ and $\frac{1}{8}$ inches with an overhead ruler and a length of five snap cubes, asking students what to do if the length isn’t exactly a $\frac{1}{4}$ of $\frac{1}{8}$ increment. The teacher will then pass out rulers to each student. The teacher will also pass out worksheets to each student. The teacher will explain to students that when they are measuring today, the length will be the longer side, the largest number and the width will be the shorter side or the smallest number. The teacher will go over the front page of the worksheet. The teacher will walk around informally assessing and
assisting students as necessary while the students do the warm up measurement activity. This should take no longer than five minutes. The teacher will go over the answers whole class, reinforcing which measurement is the length and which is the width.

**Exploration/Explanation:** The teacher will then go over the back of the paper and procedures for the activity. The students will be allowed to pick a partner or will be assigned a partner. Each pair of students will be required to work together to measure the listed classroom objects, both their length and their width (not the height). There should only be one pair of students measuring an object at one time. For example, if a group is already measuring the bookcase, then other groups must either wait their turn or measure something else. The teacher will model how to measure lengths larger than twelve inches by either providing yard sticks for the students to use or showing them how to put their finger down to mark the twelve inches, pick the ruler up and continue measuring. Indoor voices should be used. While the groups measure the listed items, the teacher will walk around to monitor behavior and to assist students as necessary.

**Evaluation:** For homework, the students will be given a blank table. At home they will be required to measure the length and width of ten pieces of furniture to the nearest ¼ and 1/8 inches. They will have to measure a bed, a desk and a chair but they will be able to choose the other seven items. The teacher will brainstorm with the students possible items to measure at home.

**Gearing Up:** If the students were introduced to millimeters yesterday, the students will also be required to measure the classroom objects in millimeters. If millimeters were not introduced yesterday, after the students finish measuring the classroom objects, the teacher will introduce millimeters as an additional means of measurement.

**Gearing Down:** If the students appear to be having difficulty with accurate measurement, the teacher will call the students back to their desks to do more guided practice measurement of common desk objects such as folders, notebooks, pencils, trade books, etc.
Directions: Measure each object in your desk to the nearest \( \frac{1}{4} \) inch and 1/8 inch. Record your results.

<table>
<thead>
<tr>
<th>Object</th>
<th>Length to the nearest ( \frac{1}{4} ) inch</th>
<th>Width to the nearest 1/4 inch</th>
<th>Length to the nearest 1/8 inch</th>
<th>Width to the nearest 1/8 inch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math book</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assignment Notebook</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Literature Circle Book</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Name: 

Directions: Measure each classroom object to the nearest ¼ and 1/8 inches and record in the table below. Remember the **length** is the **LONGEST side** and the **width** is the **SHORTEST side**. You may work with a partner. You must use INDOOR voices. If another group is measuring something you need to measure, please wait your turn or measure another object and come back later.

<table>
<thead>
<tr>
<th>Object</th>
<th>Length to the nearest ¼ inch</th>
<th>Width to the nearest ¼ inch</th>
<th>Length to the nearest 1/8 inch</th>
<th>Width to the nearest 1/8 inch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desk</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher's Desk</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carpet Square</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pencil Sharpener</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Printer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small Group Table</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small Dry Erase Board</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trash Can</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overhead Projector</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bookcase</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Homework Tray</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fish Tank</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Telephone</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sink</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student Chair</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Directions: Measure ten pieces of furniture to the nearest \( \frac{1}{4} \) and \( \frac{1}{8} \) inches. Remember that length is the LONGEST side and the width is the SMALLEST side. You must do the three object listed. The other seven are your choice! Please list the objects you decide to measure!

<table>
<thead>
<tr>
<th>Object</th>
<th>Length to the nearest ( \frac{1}{4} ) inch</th>
<th>Width to the nearest ( \frac{1}{4} ) inch</th>
<th>Length to the nearest ( \frac{1}{8} ) inch</th>
<th>Width to the nearest ( \frac{1}{8} ) inch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Desk</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chair</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
Math Lesson- Day 3

Grade: 4

Concept: discovering the definition of an average
Determining the algorithm for averaging a set of numbers

State Academic Standards:
4.6.1 Represent data on a number line and in tables, including frequency tables.
Example: The students in your class are growing plants in various parts of the classroom. Plan a survey to measure the height of each plant in centimeters on a certain day. Record your survey results on a line plot.

4.7.4 Use a variety of methods, such as words, numbers, symbols, charts, graphs, tables, diagrams, tools, and models to solve problems, justify arguments, and make conjectures.
Example: In the first example, make a table to help you explain your results to another student.

4.7.5 Express solutions clearly and logically by using the appropriate mathematical terms and notation. Support solutions with evidence in both verbal and symbolic work.
Example: In the first example, explain what happens with all the shapes that you tried.

4.7.9 Decide whether a solution is reasonable in the context of the original situation.
Example: In the last example, would an answer of 3.27 surprise you?

5.6.2 Find the mean*, median*, mode*, and range* of a set of data and describe what each does and does not tell about the data set.
Example: Find the mean, median, and mode of a set of test results and describe how well each represents the data.

Objectives: When given a set of book lengths and snap cubes, the students will be able to determine a method of averaging and compute the average book length in small groups.

Prerequisite knowledge: correct use of snap cube manipulatives

Materials List: data table poster
Markers
Five books of varying lengths
Snap cubes
Math journals
Pencils

Engagement: The teacher will ask students to get out their data tables with furniture measurements completed for homework. The teacher will display a large data table poster similar to the ones the students completed for homework. The teacher will explain that as a class they will fill in the large data poster with their measurements. The teacher will ask
a student their measurements for the length and width of their bed to the nearest ¼ inch. The teacher will record it in the correct columns on the large data chart. The teacher will then ask another student for their measurements and will record them. The teacher will then ask for another student’s measurements, making sure to pick a student whose measurements vary drastically from the first two measurements. “Oh no. All of these measurements are different from one another. How will we pick which measurements to use when we draw a room? Each one of you has different measurements for your pieces of furniture because not all furniture is the same size. What if we wanted to come up with one number that we could use in our design that would tell about the average length of a bed?” (Do not specifically define average or tell students how to calculate the average of numbers. The following student directed activity will help students discover this on their own.)

**Exploration/Explanation:** The teacher will then show five different books and give the length measurements of each to the nearest inch. (Since this is an introduction to averaging, the students will initially work with whole numbers.) The teacher will put the students in small groups and will instruct students to create a column of snap cubes for each book length. For example, if the book is twelve inches in length, then the students will link together twelve snap cubes. Repeat the question the students are answering, “What if we wanted to come up with one number that would tell about the average length of these books? Each book is a different length but I would like to know one number that I could use to tell someone about how long a book would be. Work as a group to figure out how to come up with one number. Remember that you might try a couple of different things that don’t work. If something doesn’t work, talk about why you think it didn’t work and then try something else! When you have determined one number that tells the average length of the five books, in your math journal write your definition of the word average and then write a paragraph describing how your group came up with your answer.” If the students appear to be having trouble, ask prompting questions such as, “Can I use the largest length measured to tell about how long all five of the books are? Why or why not? Can I use the smallest length measured to tell about how long all five of the books are? Why or why not?” The teacher will walk around the room observing the groups at work. The teacher will sit down with groups and provide scaffolding, redirection and encouragement as necessary. The teacher should not provide answers, however, as the goal is for students to discover the means of averaging on their own through group work and problem solving methods.

**Evaluation:** After giving the students ample time to find the definition of the word average, the teacher will initiate a whole class discussion asking different groups what they found the average of the book lengths to be, how they found their answer and what they believe the definition of an average is. Ask questions such as, “What do you think it means to find the average length?” “What did you find out about the average length of the books?” “What method did you use to find the average? Tell us about your thinking.” “Did anyone come up with a different number for the average height? How did you reach your solution?” Hopefully multiple groups came up with the correct general idea. After allowing different groups to share, tell students that an average in mathematics is one number used to accurately describe a group of numbers. Do not specifically tell students
that an average can be found by adding all numbers together and dividing by the number of items unless a group of students discovered that technique while averaging the book lengths. This algorithm will be discussed later.

**Gearing up:** If the students grasp the concept of an average and how to compute an average, introduce tomorrow’s lesson concerning averaging larger numbers.

**Gearing down:** If the student groups do not appear to be determining the average and a correct definition, the teacher will continue the activity whole group. The teacher will still not provide the answers, however. The teacher will guide the students to the answer by asking prompting questions such as, “Are all of these book lengths the same? Since they are not, we need to find one number to tell about how long the books are. Can I use the biggest length? Why or why not? Should I use the smallest length? Why or why not?”
Math Lesson- Day 4

Concept: averaging large numbers
Using the standard algorithm for computing averages

State Academic Standards:
4.2.1 Understand and use standard algorithms* for addition and subtraction.
   Example: 45,329 + 6,984 = ?, 36,296 − 12,075 = ?.
4.2.6 Use a standard algorithm to divide numbers up to 100 by numbers up to 10
   without remainders, using relevant properties of the number system.
   Example: 69 ÷ 3 = ?.
4.7.3 Apply strategies and results from simpler problems to solve more complex
   problems.
   Example: In the first example, use your method for cubes and rectangular
   solids to find what happens to other prisms and to pyramids.
4.7.4 Use a variety of methods, such as words, numbers, symbols, charts, graphs,
   tables, diagrams, tools, and models to solve problems, justify arguments, and
   make conjectures.
   Example: In the first example, make a table to help you explain your results to
   another student.
4.7.5 Express solutions clearly and logically by using the appropriate mathematical
   terms and notation. Support solutions with evidence in both verbal and
   symbolic work.
   Example: In the first example, explain what happens with all the shapes that
   you tried.
4.7.9 Decide whether a solution is reasonable in the context of the original situation.
   Example: In the last example, would an answer of 3.27 surprise you?
4.7.10 Note the method of finding the solution and show a conceptual understanding
   of the method by solving similar problems.
   Example: Change the first example so that you look at shapes with curved
   surfaces.
5.6.2 Find the mean*, median*, mode*, and range* of a set of data and describe
   what each does and does not tell about the data set.
   Example: Find the mean, median, and mode of a set of test results and
   describe how well each represents the data.

Objectives: Given several couch length measurements, the students will be able to
   determine a method of averaging larger numbers without the assistance of manipulatives
   and will be able to compute the average length.
   After teacher modeling, the students will be able to apply and use the standard algorithm
   for determining averages.

Prerequisite Knowledge: averaging numbers (yesterday’s lesson)
Adding a sequence of numbers
Materials List: homework worksheet
Overhead projector
Overhead markers
Math journals
Pencils

Engagement: The teacher will review with students what was learned the previous day about averages and how to compute them. “Yesterday we used snap cubes to figure out the average book length. We were able to use snap cubes because the numbers weren’t too large. What if we wanted to find the average of larger numbers? For example, what about the length of a couch?”

Exploration/Explanation: The teacher will present the students with five numbers representing couch measurements in inches, not in feet and inches, and in whole number increments. (Tomorrow’s lesson will focus on the decimal aspects of the ¼ inch measurements.) “What if I wanted to come up with one number that would tell the average length of a couch? The numbers are too large to use snap cubes. Instead, with your group use your journal to calculate the average couch length. Remember what we did yesterday with our snap cubes to determine the average. The same thing can be done on paper” The teacher will walk around the room as the small groups of students work to determine the average. Some students might draw pictures, whereas other groups might attempt the standard algorithm. The teacher will observe students’ work, assist as necessary and ask prompting questions when needed. When students have had ample time to determine the average of the larger numbers, the teacher will initiate a class discussion asking student groups what they did to determine the average and what they computed the average to be. The teacher will ask students basic comprehension questions concerning averages such as, “What does it mean to find the average couch length?” The teacher will also ask students, “What technique or method did you use to find the average? Explain your thinking.” “Did anyone come up with a different number for the average length? How did you reach your solution?” The teacher will make sure to emphasize the validity of each correct method after it is presented by the student groups. Once all methods used by groups have been covered, the teacher will present the standard average algorithm, unless already brought up by a student group. The teacher will demonstrate with the couch measurements that an average can be found by adding the numbers together and then dividing that number by the total number of measurements. The teacher will show the students that this standard algorithm produces the same answer as other methods. The teacher will then model using the standard algorithm to solve yesterday’s book length averaging. Once the answer is computed, the teacher will ask the students if the standard algorithm yielded the same answer. The teacher will then write the steps to averaging on the overhead and the students will copy them into their math journals under the heading, Averaging.

1. Add all numbers together
2. Count how many numbers were added together in step one
3. Divide the answer from step one by the answer from step two
**Evaluation:** The students will then work on an averaging worksheet in class while the teacher is available for assistance. The students will take the worksheet home and finish whatever was not completed in class for homework.

**Gearing up:** If the students appear to understand the standard algorithm for determining averages, move onto the next lesson which asks students to compute the average length and width of furniture.

**Gearing down:** If the students do not appear to understand averaging, the teacher will model more problems on the overhead before giving students the worksheet. If necessary the worksheet can be done as a whole class activity until the students appear to be ready for independent work.
Directions: Find the average for each set of numbers. Show all of your work.

1. 69, 74, 86, 73, 70, 69, 84
2. 47, 40, 48, 47, 41, 47, 45

3. 33, 34, 35
4. 11, 12, 13, 14, 15

5. There were nine people standing in line to check out at the library. Their shoe sizes were: 4, 9, 7, 5, 8, 5, 11, 6.

6. The ages of the people in the fifth row at the ball game were: 12, 12, 11, 5, 2, 34, 37, 52, 10, 10, 16, 17, 23.
Math Lesson- Day 5

Concept: rounding decimals to the nearest whole number

State Academic Standards:

4.1.8 Write tenths and hundredths in decimal and fraction notations. Know the fraction and decimal equivalents for halves and fourths (e.g., \( \frac{1}{2} = 0.5 = 0.50 \), \( \frac{3}{4} = 1 \frac{3}{4} = 1.75 \)).

Example: Write \( \frac{2}{100} \) and \( \frac{3}{4} \) as decimals.

4.1.9 Round two-place decimals to tenths or to the nearest whole number.

Example: You ran the 50-yard dash in 6.73 seconds. Round your time to the nearest tenth.

4.6.1 Represent data on a number line and in tables, including frequency tables.

Example: The students in your class are growing plants in various parts of the classroom. Plan a survey to measure the height of each plant in centimeters on a certain day. Record your survey results on a line plot.

Objectives: When given furniture measurements, the students will be able to convert the measurements from fractions to decimals and round the decimals to the nearest whole number.

Prerequisite knowledge: \( \frac{1}{4} = .25 \), \( \frac{1}{2} = .5 \), \( \frac{3}{4} = .75 \)

Definition of a whole number

Materials List: overhead projector
Overhead markers
Ruler transparency
Large class data chart w/ student furniture measurements written in
Student versions of class data chart
Pencils

Engagement: Show students the data chart that compiles the students’ furniture measurements. Start to read off the measurements for the first piece of furniture. “There is something different about these numbers. What is the difference between these measurements and the measurements given to you yesterday to average?” Students should recognize that yesterday’s measurements were whole numbers but the measurements taken by the students contain fractional parts. Tell the students that when they average their furniture measurements, we want to use whole numbers. “Today we are going to practice rounding our numbers.”

Exploration/Explanation: Ask students how you would write 26 \( \frac{1}{2} \) inches in decimal form. Write both on the overhead with an equal sign in between. Ask students how to write 26 \( \frac{3}{4} \) in decimal form. Write both on the overhead above the first example, so that the numbers will be ordered from least to greatest. Ask students how to write 26 \( \frac{1}{4} \) in decimal form. Write both on the overhead underneath the previous two examples, so that
the numbers are ordered from least to greatest. "When we round numbers to the nearest whole number, I need to look at the first number after the decimal point. If that number is below 5, I am going to round down. If that number is 5 or above, I am going to round up. Let's look at the first number 26.25. What number should I be looking at for rounding?"

The teacher will put their finger on the first 2 (in the tens place) and ask students if that is the number they need to look at for rounding to the nearest whole number. The students will vote with either thumbs up for yes or thumbs down for no. The teacher will do the same for the number 6 asking the students to vote. The teacher will do the same for the number two following the decimal point. When the students vote affirmatively, the teacher will ask, "How do you know that is the correct digit to look at for rounding to the nearest whole number?" The student should reply that it is the number after the decimal point. The teacher will then ask the students if it is below five or five and higher. The teacher will then explain that because the two is lower than five, it needs to be rounded down to the number 26. The teacher will write the number on the overhead next to the number 26.25 and label it rounded. Ask students, "Why did I not round down to the number 25?" Place an overhead transparency of a ruler showing the distance between 26 and 27 inches, marked in ¼ inch increments. The teacher will ask the students, "What whole number is 26.25 or 26 ¼ closest to?" Show students that it is closest to the whole number 26. Follow the same procedures for the numbers 26.5 and 26.75 asking students to vote on which digit to look at to determine whether to round up or down, and then ask students how they know to use those numbers. Also, ask students why they are rounding up to the number 27 using the ruler transparency. The teacher will then write the number 31.5 on the overhead and ask the students in groups of two to discuss how to round the number to the nearest whole number. After giving the students a moment to discuss, the teacher will call on a pair of students to answer and explain the process. The teacher will continue with the numbers 14.75 and 18.25, allowing the students to work in pairs and then calling upon a pair to verbalize the answer and the thought process behind coming up with the answer.

**Evaluation:** If the students appear to grasp the idea of when to round up and when to round down, the teacher will hand out student copies of the large furniture measurement data chart, with the student measurements copied in each cell. The teacher will go over the measurements in the first cell together showing students how to place an equal sign next to the measurement and the number in decimal form to the right of the equal sign. Then show the students where to write the rounded numbers in the next cell. After modeling this format using the first set of numbers in the first cell, ask students to work together in pairs to put each number in decimal form and then round each number. Whatever the students do not complete in class will be sent home to be completed individually as homework. The teacher will walk around as the students work to assist as necessary, observe student work and to identify possible misconceptions in the students' work.

**Gearing up:** If the students finish putting all of the numbers in decimal format and rounding them to the nearest whole number, ask students to work in pairs and see if they can figure out how to write 1/8, 3/8, 5/8 and 7/8 in decimal form. Have the students work in their math journals.
**Gearing down:** If the students appear to have trouble rounding the numbers to the nearest whole number, continue to round the measurements whole class until students appear ready to work in pairs. If the students appear to have trouble with writing the measurements in decimal form, get grid paper out, have students color half of the squares, count them and then show students that is where we get .50 (50 out of 100) from. Do the same for ¼ and ¾.
<table>
<thead>
<tr>
<th>Object</th>
<th>Length to the nearest ( \frac{1}{4} ) inch</th>
<th>Length in Decimal Form</th>
<th>Rounded to the nearest whole number</th>
<th>Width of the nearest ( \frac{1}{4} ) inch</th>
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Math Lesson- Day 6

Grade 4

Concept: using the calculator to average numbers

State Academic Standards:

4.2.6 Use a standard algorithm to divide numbers up to 100 by numbers up to 10 without remainders, using relevant properties of the number system.
   Example: $69 \div 3 = ?$.

4.6.1 Represent data on a number line and in tables, including frequency tables.
   Example: The students in your class are growing plants in various parts of the classroom. Plan a survey to measure the height of each plant in centimeters on a certain day. Record your survey results on a line plot.

4.7.3 Apply strategies and results from simpler problems to solve more complex problems.
   Example: In the first example, use your method for cubes and rectangular solids to find what happens to other prisms and to pyramids.

4.7.4 Use a variety of methods, such as words, numbers, symbols, charts, graphs, tables, diagrams, tools, and models to solve problems, justify arguments, and make conjectures.
   Example: In the first example, make a table to help you explain your results to another student.

4.7.5 Express solutions clearly and logically by using the appropriate mathematical terms and notation. Support solutions with evidence in both verbal and symbolic work.
   Example: In the first example, explain what happens with all the shapes that you tried.

4.7.9 Decide whether a solution is reasonable in the context of the original situation.
   Example: In the last example, would an answer of 3.27 surprise you?

4.7.10 Note the method of finding the solution and show a conceptual understanding of the method by solving similar problems.
   Example: Change the first example so that you look at shapes with curved surfaces.

5.6.2 Find the mean*, median*, mode*, and range* of a set of data and describe what each does and does not tell about the data set.
   Example: Find the mean, median, and mode of a set of test results and describe how well each represents the data.

Objective: Using a calculator, the students will be able to apply their knowledge of the standard algorithm for averaging to compute the average length and width of their furniture measurements.

Prerequisite Knowledge: basic calculator usage
Standard algorithm for averaging
Addition of a series of numbers
Division

**Materials List:**
- Overhead projector
- Overhead markers
- Student data tables with measurements rounded to the nearest whole number
- Student worksheets
- Pencils
- Calculators
- Math journals

**Engagement:** Review with students how to average numbers. Ask students to verbalize each of the three steps. As students say them, write them on the overhead for the visual learners. For a quick warm-up, ask students to average the numbers 4, 6 and 11 in their math journals. Go over the answer whole group. The teacher will then ask each student to get out their data charts with the class measurements rounded to the nearest whole number.

**Exploration/Explanation:** Model averaging the first set of measurements for the length of the bed on the overhead with the use of the calculator, thinking aloud through each step. Emphasize that it is very important to carefully enter the numbers into the calculator so that the answer is correct. Tell students and model that each average should be done twice to verify that the answer is correct. The students will record both answers in the section labeled “average.” If the two answers are not the same, the students will average them a third time and record that answer as well. Whichever answer is computed twice, will be the average used. The correct average needs to be circled. After modeling the procedure, ask the students to copy your work into their first cell. Then ask students in pairs to work on the second set of numbers to average, following the same procedure as the teacher just modeled. The teacher will walk around the room as the student pairs work to assist students as necessary and to identify potential problems and misconceptions that need to be addressed. After the students have had ample time to average the numbers twice, the teacher will go over the procedure and correct answer. (The answer will depend on each individual class’s measurements.) If the students appear to understand averaging, review the procedure they are to follow by writing each step on the overhead and verbalizing it.

1. Add each measurement on the calculator
2. Divide that number by the total number of measurements
3. Record the answer in the answer box
4. Repeat and record the second answer in the second answer box
5. If we got the same answer twice circle it and move on, if not repeat steps 1-3 again and record it in the third answer box. Circle the answer computed twice.
6. Move onto the next group of measurements.

The teacher will tell students that they will continue to average the remaining lengths and widths of the furniture they measured last week. “As you are averaging, look at the
numbers. What furniture has the longest average length? The longest average width? What piece of furniture has the shortest average width? And the shortest average length?"

**Evaluation:** The students will work in pairs to average the lengths and widths of the furniture measured, using calculators and recording answers. The teacher will walk around and assist students as necessary, observe students’ work and identify possible problems and misconceptions. If the students do not finish averaging the remaining lengths and widths, which is likely, the students will complete at home individually for homework.

**Gearing up:** If the students finish averaging the length and width of all pieces of furniture measured, go over the answers whole class, so that all students have the same measurements as one another.

**Gearing down:** If the students appear to have problems averaging the numbers, do a couple groups of measurement whole class, having the students go step by step with the teacher until ready to work in pairs.
Name: ____________________________________________

Directions:
1. For each length and width add all measurements on the calculator
2. Divide that number by the total number of measurements
3. Record the answer in the answer box
4. Repeat and record the second answer in the second answer box
5. If we got the same answer twice circle it, put an X in answer box 3 and move on. If not repeat steps 1-3 again and record it in the third answer box. Circle the answer you received twice.
6. Move onto the next group of measurements.

<table>
<thead>
<tr>
<th>Piece of Furniture</th>
<th>Average Length-Answer 1</th>
<th>Average Length-Answer 2</th>
<th>Average Length-Answer 3</th>
<th>Average Width-Answer 1</th>
<th>Average Width-Answer 2</th>
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Which piece of furniture has the longest average length? ____________________
Which piece of furniture has the longest average width? ____________________
Which piece of furniture has the shortest average length? ____________________
Which piece of furniture has the shortest average width? ____________________
Math Lesson- Day 7

Grade 4

Concept: introduction to Anne Frank

State Academic Standards:
4.7.2 Summarize major ideas and supporting evidence presented in spoken presentations.

Objectives: After watching a teacher given Power Point presentation on Anne Frank, the students will be able to recall important ideas about Anne Frank and her hiding.

Prerequisite knowledge: none

Materials List: computer
Power Point presentation on Anne Frank
Student worksheets
Pencils
Teacher notes
Wireless mouse so that you can transition the slides from anywhere in the room would be helpful but not necessary!

Engagement: Have all of the length and width averages written on a large class data table. Remind students that we have been working very hard to get these numbers. Review all of the steps taken so far in the process- first came measurement, then rounding and finally averaging. Ask students why they think we have done all of this work to come up with the averages of furniture. “Today we are going to learn about a very important girl who lived during World War II. At the end of the Power Point presentation, you will understand what furniture has to do with World War II. While you are watching the Power Point presentation you will have a worksheet to fill out. It is very important to pay attention during the Power Point presentation so that you don’t miss an answer.” Then pass out the worksheets, instructing students to put their names on top. Preview each of the questions by reading them aloud with the students. Remind students that there will be some information on the screen but to still listen because the teacher will be giving additional information that is very important.

Exploration/Explanation: Walk around the room while showing the Power Point presentation and the teacher notes attached. The students should be listening, watching the screen and filling in the answers to their questions.

Evaluation: Once the power point presentation is completed, the teacher will ask basic comprehension questions similar to those on the worksheet. The teacher will also ask students what furniture has to do with Anne Frank. Once the students have made the connection the teacher will tell the students, “Anne Frank was actually very lucky because the place in which she was hiding was fairly large in comparison to other places
Jewish people hid from the Nazis. However, to see exactly how much room Anne Frank and her roommate had, we are draw Anne Frank’s room life size- using the measurements taken by each one of you!”

The teacher will collect the student worksheets for evaluation.

**Gearing up:** If the students understood the Power Point presentation and Anne Frank’s life and complete the student worksheet without problems, have the students write a journal entry in their reading journals about what they think it would be like to be in hiding, afraid of being found and having to stay quiet all day so no one knows you are there.

**Gearing down:** If the students had trouble understanding the Power Point presentation and Anne Frank’s life, complete the student worksheet together.

**Teacher Notes for Anne Frank Power Point slide**

*Slide text is in black*

*Additional information teacher should verbally tell students is underlined*

**ANNE FRANK:**

**A Young Girl in Germany**

**Slide 1**

Anne Frank’s Life

- Anne was born in Germany in 1929
  
  Point out Germany on the map on the Power Point slide

- The Frank family was Jewish
  
  Tell students that Judaism is a religion and people who follow Judaism are called Jewish or Jews
  
  Make connections with any references to Jewish persons in World War II, from lit circles books, etc.
  
  Tell students that there were not a lot of Jews in Germany in comparison to other religions.

- She moved to Amsterdam, Holland in 1934
  
  Point out Holland on the map on the Power Point slide
  
  Tell students that Anne and her family moved to Holland because they didn’t feel safe in Germany anymore. The people in power, the Nazis did not like Jewish people simply because they were different.

**Slide 2**

Anne Frank’s Life

- On July 6, 1942 the Frank family left their home
  
  Tell students that the Franks had to leave their home because Anne’s older sister, Margot, was told by the Nazis that she would have to leave and go to a work camp with other Jewish people. The Franks didn’t want to be separated so they went into hiding.
Moved into the “Secret Annex”
Tell students that the picture is a picture of the building that Anne and her family hid in during the war.
The building was actually the location of Anne’s father’s business.

More people join the Franks in the “Secret Annex”
After the Franks moved in, another family with a mother, father and son moved in and another gentleman moved in later that year. In all there were eight people in the “Secret Annex.”

Slide 3
Anne Frank’s Life
• The Franks live in the “Secret Annex” for two years

Anne Frank keeps a diary
For Anne’s birthday the year before going into hiding, she received a diary. While she was in hiding she wrote in her diary. Now it is published and many children and adults read about her experiences in her book. Even though she was a young girl, she was a very gifted writer. When reading her book it is easy to forget that a child wrote the entries.

Slide 4
The Secret Annex
Tell students that this is a floor plan of the building and the “Secret Annex.” Tell students to imagine that they are on the ceiling and are looking down at the building. Show students that the rooms toward the bottom of the page were Anne’s father’s business. While the Franks were in hiding, people were still working next door, so the Franks had to be very quiet during the day. The rooms toward the top of the page are the “Secret Annex.” Those rooms were hidden and most people did not even know they existed. To get to the “Secret Annex” there was a fake bookcase against the wall in the hall. The bookcase actually moved away from the wall to reveal all of the rooms!
Point out Anne Frank’s room on the floor plan.

Slide 5
Anne Frank’s Life
• The Frank family is discovered and captured
After living in the “Secret Annex” for a little over two years, the Franks and their roommates were captured by the Nazis. They were no longer safe.

• Anne Frank dies at age 15 in the camps
All of the people in the annex were taken to different camps where the Nazis took many Jewish people. Anne Frank and everyone from the annex died in the camps, except for Anne’s father.
ANNE FRANK: A Young Girl in Germany

Anne Frank's Life
- Anne was born in Germany in 1929
- The Frank family was Jewish
- She moved to Amsterdam, Holland in 1934

Anne Frank's Life
- On July 6, 1942 the Frank family left their home
- Moved into the "Secret Annex"
- More people join the Franks in the "Secret Annex"

The Secret Annex

Anne Frank's Life
- The Franks live in the "Secret Annex" for two years
- Anne Frank keeps a diary

Anne Frank's Life
- The Frank family is discovered and captured
- Anne Frank dies at age 15 in the camps
Anne Frank Power Point Presentation

Name: __________________________________________

Directions: Answer the questions during or after the Power Point presentation. You must write questions 2 and 6 in complete sentences. You do not have to write complete sentences for questions 1, 3, 4, and 5. Listen carefully!

1. What religion was Anne Frank? ______________________

2. Why did the Frank family move to Amsterdam?
_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________

3. How many people total lived in the “Secret Annex?” _________

4. How many years did the Franks live in the “Secret Annex?” ___

5. The “Secret Annex” was in the same building as what else?
_________________________________________________________________________

6. What happened to Anne Frank after she was captured by the Nazis?
_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________
Math Lesson- Day 8

Grade 4

Concept: estimating areas
Measurement using a yardstick
Problem solving using spatial reasoning and justification of answers

State Academic Standards:
Math:
4.5.1 Measure length to the nearest quarter-inch, eighth-inch, and millimeter.
Example: Measure the width of a sheet of paper to the nearest millimeter.
4.7.1 Analyze problems by identifying relationships, telling relevant from irrelevant information, sequencing and prioritizing information, and observing patterns.
Example: Solve the problem: “Find a relationship between the number of faces, edges, and vertices of a solid shape with flat surfaces.” Try two or three shapes and look for patterns.
4.7.4 Use a variety of methods, such as words, numbers, symbols, charts, graphs, tables, diagrams, tools, and models to solve problems, justify arguments, and make conjectures.
Example: In the first example, make a table to help you explain your results to another student.
4.7.9 Decide whether a solution is reasonable in the context of the original situation.
Example: In the last example, would an answer of 3.27 surprise you?
4.7.10 Note the method of finding the solution and show a conceptual understanding of the method by solving similar problems.
Example: Change the first example so that you look at shapes with curved surfaces.

Science:
4.2.1 Judge whether measurements and computations of quantities, such as length, area*, volume*, weight, or time, are reasonable.

Objectives: With teacher guidance, the students will be able to compare and make connections between the size of Anne Frank’s room to the classroom and the playground.

Prerequisite knowledge: knowledge of inches and use of a yardstick
Spatial estimation

Materials List: overhead projector
Overhead markers
Transparency of the “Secret Annex” floor plan
Math journals
Pencils
Yardsticks
Engagement: Ask students what they remember about Anne Frank from yesterday’s Power Point presentation. If students do not bring it up, the teacher will ask questions guiding students to discuss how the Frank family had to hide for two years in the “Secret Annex.” On the overhead place the transparency of the floor plan of Otto Frank’s business and the “Secret Annex.” (the same one in yesterday’s Power Point) With an overhead marker, the teacher will outline the room Anne Frank shared with her roommate. The teacher will write the dimensions next to the outlined room.

Exploration/Explanation: The teacher will ask the students which measurement is the length and which is the width based on the criteria used last week when measuring furniture. The longer measurement is the length and the shorter measurement is the width. The teacher will then ask the students if they think the classroom is larger or smaller than Anne Frank’s room. The teacher will have the students pair up and estimate together whether the classroom is larger or smaller and why. The students will write their answers in complete sentences in their math journals. Once the students have had ample time to discuss their estimation and write their response, the teacher will ask numerous pairs to share their responses. After a few pairs have shared, the teacher will ask the students who think the classroom is smaller than Anne Frank’s room to raise their hand. Record that number on either the chalkboard or the overhead. Then have the students who believe the classroom is larger than Anne Frank’s room to raise their hand. Record that number as well. Put the pairs together into groups of four. Give each pair a yardstick and have the groups measure the length and width of the classroom, record the measurements in their math journals and return to their seats when finished. As a whole class discuss which is larger, Anne Frank’s room or the classroom. How do we know? (The set of numbers for the classroom will be larger.) Tell the students, “We are going to be drawing our own Anne Frank room on the playground. We will be drawing the room out to see how large it is and drawing the furniture in to see how much space Anne and her roommate actually had.” Ask the students if there will be enough room on the playground to draw the Anne Frank room with chalk and how they know. Let students discuss briefly in pairs and then write their responses in their math journals in complete sentences. The teacher will walk around as the students write in their journals. Then ask for student responses. Yes, there will be enough room because it was already determined that Anne Frank’s room was smaller than the classroom. The playground is bigger than the classroom so there will be plenty of room to draw the room outside.

Evaluation: The students will turn their math journals in. The teacher will read the students’ responses to both questions. From those responses the teacher will informally assess whether or not the students understand the idea of greater and less than in spatial terms.

Gearing up: If the students appear to make good, reasonable estimates, ask them to find the perimeter and area of Anne Frank’s room, as well as the classroom and connect that with their knowledge of which is larger.
**Gearing down:** If the students do not understand the idea of knowing that the room will fit on the playground due to its size in relation to the classroom, take the students outside to the playground to actually measure out the size of the room.
Activity 7: The Annex

Using the information given to you about Anne Frank's Secret Anne: create a scale drawing of the floor plan of the place where Anne Frank during the Holocaust.

The actual dimensions are as follows:

- Anne Frank & Fritz Pfeffer's room 16'8" x 6'9"
- Otto, Edith & Margot Frank's room 16'8" x 10'4"
- Peter van Pel's room 7' x 13'6"
- Hermann & Augusete van Pel's room 17' x 18'9"

http://www.gtps.k12.nj.us/schools/gtms/garrityb/webquest/page11.html
Math Lesson- Day 9

Grade 4

Concept: drawing a picture to aid in problem solving
Using a data chart to locate needed information

State Academic Standards:

4.6.1 Represent data on a number line and in tables, including frequency tables.
   Example: The students in your class are growing plants in various parts of the
   classroom. Plan a survey to measure the height of each plant in centimeters on a
   certain day. Record your survey results on a line plot.

4.7.4 Use a variety of methods, such as words, numbers, symbols, charts, graphs,
   tables, diagrams, tools, and models to solve problems, justify arguments, and
   make conjectures.
   Example: In the first example, make a table to help you explain your results to
   another student.

4.7.5 Express solutions clearly and logically by using the appropriate mathematical
   terms and notation. Support solutions with evidence in both verbal and
   symbolic work.
   Example: In the first example, explain what happens with all the shapes that
   you tried.

Objectives: After teacher modeling and discussion about how to draw a picture of the
furniture in Anne Frank’s room, the students will be able to diagram Anne Frank’s room
by correctly placing the furniture and labeling its dimensions.

Prerequisite Knowledge: the difference between length and width

Materials List: overhead projector
   Overhead markers
   Transparency of the floor plan of Anne Frank’s room
   8 by 11 drawing paper
   Pencils
   Data charts of average furniture lengths and widths
   Math journals

Engagement: Tell students that tomorrow they will be drawing Anne Frank’s room
outside on the playground. To get ready for that exciting day, a plan needs to be made of
the room so the students know what goes where and how big everything is. This is finally
where the data tables with the averaged furniture measurements come in!

Exploration/Explanation: Pass out 8 by 11 white drawing paper to students. The teacher
will model drawing a large rectangle on the piece of paper, almost as large as the piece of
paper but not quite. The teacher will tell students that the drawn rectangle will represent
the dimensions of the Anne Frank room. Tell students that before the room can be drawn
outside on the playground, the students are going to draw a picture to make sure that everything will fit. Ask students which side of the rectangle will be the length of the room- the longer side and which side will be the width of the room- the shorter side. Model writing the dimensions of the room on the corresponding sides. Tell the students that they will be drawing a model of Anne Frank’s room using the average lengths and widths of the furniture they measured. Ask students why they are using averaged numbers instead of the actual measurements of her furniture. Tell students that we do not know exactly how big everything was (except for the length of the couch she slept on!). That is why we had to measure furniture. Tell students that we will not be putting the furniture anywhere because it is actually known what furniture Anne had in her room in the “Secret Annex” and exactly where that furniture was placed. Put on the overhead a blown up picture of Anne’s room from the floor plan shown originally in the power point presentation on Anne Frank. Ask students to point out where different pieces of furniture were located such as the bed and the couch. Tell students that it is also known there was a chair next to the bed. Write chair next to the bed but do not draw it in. Tell students that Anne slept on the couch but the couch was actually too short for her. She had to place a chair next to the couch so that she could lie down to sleep! Then tell students that there was also a desk next to the bed. It was at that desk that Anne wrote in her diary. Ask students to take out their class average data charts, with the length and width of each piece of furniture averaged. Ask students what piece of furniture the class should draw first on their paper. Guide students to the bed because its exact placement is known, it was in the corner of the room. Ask students why starting with the piece of furniture in the corner would be a good problem solving strategy in this problem. Ask students to locate the average length of a bed on their chart. Model drawing the bed on the overhead and writing the length dimension on the corresponding side. Ask students to write the width in the appropriate place. Walk around the room and assist students as necessary. After the width has been written on all papers, ask students how they knew to use the length for the first side and the width for the second side? Students should recognize that the longer side is the length and the shorter side is the width. Then tell the students that next to the bed was a desk. Ask students to locate the average length and width for a desk. Ask students to draw the desk on their map, writing in the length and width dimensions. Ask students to do this individually, not to worry what the person next to them is doing. The teacher will walk around the room and observe student placement of the desk. The teacher will then ask a student to stand up and show their placement of the desk. Ask students if anyone drew the desk in a different place. Have another student stand up and show their drawing to the class. (Provided both desks are next to the bed, both will be correct.) Ask students which drawing is correct. Arguing will likely ensue. Ask students what they knew about where the desk was supposed to go before drawing it. The only thing the teacher said was that the desk was next to the bed. Ask students if the desk is next to the bed in the first drawing- yes. Ask if the desk is next to the bed in the second drawing- yes. The teacher never said if it was right next to the bed or not, so both drawings are correct. Ask students how they know that both pieces of furniture can fit, the bed and the desk, along that wall of Anne Frank’s room. Students should recognize that their lengths added together are shorter than the total length of the room.
**Evaluation:** The students will then work individually to place and draw the couch (give the students the length dimension as being 54 inches long because that was the actual length of Anne Frank’s couch) and the chair on their drawing. The students will be required to draw the two pieces of furniture and to label their lengths and widths. The teacher will walk around the room while the students work assisting students as necessary and answering questions. The teacher will collect the drawings to assess students’ understanding of length, width and drawing a picture to solve a problem. Additionally, for homework the students will be asked to draw a picture of their bedroom, including the lengths and widths of their furniture (not the class averages.) The students will have until day 12 of the unit to complete this assignment.

**Gearing Up:** If the students understand the use of a drawing to help solve problems and finish their drawing correctly, ask students to write in their journal the steps taken to draw a floor plan.

**Gearing Down:** If the students are having trouble drawing the couch and chair on their own, bring the class back together and work through the placement of the couch as a group. If the students appear ready to try it once again on their own, have them draw and write in the dimensions of the couch on their own. Otherwise, complete the placement of the couch together as well.
Grade 4

Concept: drawing a life size model by measuring

State Academic Standards:

4.5.1 Measure length to the nearest quarter-inch, eighth-inch, and millimeter.
Example: Measure the width of a sheet of paper to the nearest millimeter.

4.7.1 Analyze problems by identifying relationships, telling relevant from irrelevant information, sequencing and prioritizing information, and observing patterns.
Example: Solve the problem: “Find a relationship between the number of faces, edges, and vertices of a solid shape with flat surfaces.” Try two or three shapes and look for patterns.

4.7.4 Use a variety of methods, such as words, numbers, symbols, charts, graphs, tables, diagrams, tools, and models to solve problems, justify arguments, and make conjectures.
Example: In the first example, make a table to help you explain your results to another student.

4.7.10 Note the method of finding the solution and show a conceptual understanding of the method by solving similar problems.
Example: Change the first example so that you look at shapes with curved surfaces.

Objectives: Using student drawn floor plans, the students will draw a life size floor plan of Anne Frank’s room.
After drawing a life size replica of Anne Frank’s room on the playground, the students will evaluate the two week process and their individual performance through journaling.

Prerequisite Knowledge: measurement to the nearest inch
Use of a yardstick
How read a floor plan/ drawing

Materials List: student drawn floor plans
Chalk
Yard sticks
Pencils
Math journals

Engagement: “Today is the day we are going to go outside and draw a life size model of Anne Frank’s room. Based on the floor plans you drew yesterday, do you think Anne Frank’s room seemed small with all of the furniture in it or do you think her room was fairly large? Why?” After a brief discussion of students’ predictions, assign students into four small groups. Go over the rules for being outside. Then discuss working together as a team. No one person should be doing all of the work. All work should be shared equally.
between team members and there should be no fighting. People unable to work cooperatively in groups will be not be permitted to continue the activity. Then go over procedures, giving each group one side of the room to draw and one piece of furniture in the room to draw using a yard stick. Ask the students if the furniture should be drawn first or the room dimensions and why? Remind students that when they drew their floor plans the room dimensions were drawn first so they knew where they could place the furniture. When you bring furniture into a room, the walls are already there. They are the guidelines for what will fit where. Then explain that the upper left corner of the room has already been marked on the playground by the teacher. Ask students if all four groups can start drawing the outside room walls at once. Why or why not? Help students realize that only the two walls that meet at the point already drawn can begin or otherwise the walls might not meet up with one another.

**Exploration/Explanation:** Take the students outside to the point already drawn that is the upper left hand corner. Have the first two teams begin to measure using the yard sticks. Have the remaining two groups observe the first two groups’ work. Prompt the students standing with the teacher to make comments on how the groups worked together (or didn’t work together) and their method for drawing the outside walls. Once the two groups are done, the teacher will hold a brief two minute discussion with the entire class highlighting the positive things done by the first two groups and addressing any potential issues that might have arisen. Then have the second two groups measure and draw their walls. Have the first two groups observe the second two groups in action asking them to comment on how the groups worked together (or didn’t work together) and their method for drawing the outside walls. Once the outside walls have been drawn have the students then work on drawing their designated piece of furniture. The teacher will watch and observe the students as they draw the furniture pieces. Once all groups have completed their task, collect all of the yard sticks and floor plans. Have the students gather around the completed room and ask for general comments first. Then ask students if the room was larger than they thought it would be, was it smaller or about how big they thought it would be? Then have the students a few at a time stand in the room, making sure they do not stand on any of the furniture. Ask students if they feel cramped. Does it seem larger than their room at home? Does it seem smaller? Have students lie on the “couch” that Anne would have used as a bed. Is it the right size for them or do their feet hang off the end as well? Once all students have had the opportunity to stand in the room, the teacher will take the class back inside.

**Evaluation:** Once inside the teacher will congratulate the class on their ability to draw a life size model of Anne Frank’s room and on their teamwork in accomplishing that task (provided it is deserved.) Then have the students open their math journals and respond that at least two of the following questions. Allow them to choose the questions they want to answer.

1. How would you feel if you were living in the size of Anne Frank’s room with one other person? Would you feel comfortable, cramped, roomy? Explain why.
2. What steps did the class take to draw Anne Frank’s room? Were any of the steps more important than the others? Were there any steps that could have been left out?
3. Which part of this unit was the hardest for you? (Measuring furniture at home, averaging the numbers, drawing the floor plan, working with your team members, etc.) Why do you think it was difficult?

4. Which part of this unit was the easiest for you? Why do you think it was easy?

5. Which part of this unit have you had the most fun with? Why?

6. Describe how your team worked together as a group today. On a scale from 1 to 5, 5 being the highest and 1 being the lowest, what grade would you give your team’s teamwork and why?

**Gearing Up:** Have the students invite other classes to see their work. Before inviting them outside, have the students briefly explain the steps they took to achieve this accomplishment!

**Gearing Down:** If the students have trouble drawing their pieces of furniture, have each group work individually while the others watch. This could potentially relieve some confusion.
Math Lesson- Day 11

Grade 4

Concept: scale drawings

State Academic Standards:

4.1.3 Round whole numbers up to 10,000 to the nearest ten, hundred, and thousand. Example: Is 7,683 closer to 7,600 or 7,700? Explain your answer.

4.2.6 Use a standard algorithm to divide numbers up to 100 by numbers up to 10 without remainders, using relevant properties of the number system. Example: 69 ÷ 3 = ?.

4.7.4 Use a variety of methods, such as words, numbers, symbols, charts, graphs, tables, diagrams, tools, and models to solve problems, justify arguments, and make conjectures. Example: In the first example, make a table to help you explain your results to another student.

4.7.6 Recognize the relative advantages of exact and approximate solutions to problems and give answers to a specified degree of accuracy. Example: You are telling a friend the time of a TV program. How accurate should you be: to the nearest day, hour, minute, or second?

Objective: The students will be able to construct a scale drawing of Anne Frank’s room based on their original floor plan. The students will be able to compare scale drawings and their original floor plans to determine which is more accurate and in what situations each might be best used.

Prerequisite Knowledge: skip counting by 10s
Some knowledge of scale
How to read a floor plan/drawing

Materials List: math journals
Pencils
Original student drawn floor plans of Anne Frank’s room
Transparency of floor plan of Anne Frank’s room
Transparency of 1 inch grid paper
Overhead projector
Overhead markers
One inch grid paper cut to 20 by 8 inches

Engagement: “Last week we made a life size drawing on the playground of Anne Frank’s room. We had to draw floor plans to make our drawing but our floor plans were not perfect. All of the furniture was included in our floor plans and we also included the dimensions or measurements but we didn’t draw our floor plans to scale. What does it mean to draw something to scale?” Discuss the meaning of drawing to scale.
Exploration/Explanation: It is known that Anne Frank’s room was 200 inches by 81 inches. If we want to make a scale drawing of Anne Frank’s room where one inch equals ten inches, how long would the room be? Twenty inches. How wide would Anne Frank’s room be? About eight inches. Tell the students that it would actually be a little over 8 inches but we are going to round to the nearest inch. Show students one inch grid paper that has already been cut to twenty inches by eight inches. Give each student a piece of this paper and have them count aloud by tens (for ten inches) as a group while moving their finger from square to square. Emphasize to students that there are twenty squares and Anne Frank’s room was two hundred inches. Have students do the same for the width, counting by tens as they move their finger from square to square. Then have students get out their floor plans. Starting with the bed ask students for the dimensions, then ask if each square equals ten inches, how many squares long will the bed be and how many squares wide will the bed be. Model thinking aloud through the process using grid paper on the overhead. The teacher will also model counting from the corner by tens along each square until reaching the length of the bed. Tell students that is how long the bed is. Model the same procedure with the width. Then show students how to draw the bed in. Have the students draw the bed onto their grid paper, counting each square by ten until reaching the length and width. Once all students have drawn the bed, ask the students if the length and width need to be written in as done in the original floor plan. Guide students to understand that because this floor plan is drawn to scale the dimensions do no need to be written in. Anyone who knows that on our map one inch equals ten inches, they will be able to figure out the dimensions by counting the number of squares in the bed’s length and width. “If someone walked in right now and didn’t hear me say what our scale was, would they know by looking at what I have drawn so far?” No. Model writing in a scale key that says 1 inch= 10 inches. Have the students also write the scale on their grid paper. Then, have the students help place and draw the desk on the overhead grid paper. Ask students, using our scale, how many squares long will the desk be? How many squares wide will the desk be? (These will vary depending on each class’s average lengths and widths.) Draw the desk on the overhead grid paper. Instruct students to also draw the desk onto their grid paper. When all students are done, ask why we do not need to include dimensions like in our first drawing. Ask students to also explain the process for drawing each piece of furniture to scale as a means of gauging comprehension.

Evaluation: If the students comprehend drawing to scale on grid paper, have them finish the scale drawing of Anne Frank’s room by placing the couch and the chair on their grids.

Gearing up: If students accurately finish their scale drawings of Anne situation would you use the Frank’s room, have them compare their scale drawing to their original floor plan. How are the drawings similar? How are they different? In what original floor plan? When might it be better to use a scale drawing? Which is more accurate?

Gearing down: If the students appear to have trouble, continue the scale drawing activity whole class, guiding students through each step and reinforcing the idea that one square on the grid paper equals ten inches.
Math Lesson- Day 12

Grade 4

Concept: scale drawings

State Academic Standards:

4.1.3 Round whole numbers up to 10,000 to the nearest ten, hundred, and thousand. Example: Is 7,683 closer to 7,600 or 7,700? Explain your answer.

4.2.6 Use a standard algorithm to divide numbers up to 100 by numbers up to 10 without remainders, using relevant properties of the number system. Example: 69 ÷ 3 = ?

4.7.3 Apply strategies and results from simpler problems to solve more complex problems. Example: In the first example, use your method for cubes and rectangular solids to find what happens to other prisms and to pyramids.

4.7.4 Use a variety of methods, such as words, numbers, symbols, charts, graphs, tables, diagrams, tools, and models to solve problems, justify arguments, and make conjectures. Example: In the first example, make a table to help you explain your results to another student.

4.7.6 Recognize the relative advantages of exact and approximate solutions to problems and give answers to a specified degree of accuracy. Example: You are telling a friend the time of a TV program. How accurate should you be: to the nearest day, hour, minute, or second?

Objectives: After drawing Anne Frank’s room to scale, the students will be able to draw scale drawings of their own bedrooms on grid paper.

Prerequisite Knowledge: knowledge of scale
Skip counting by 10s
How to read a floor plan/ drawing

Materials List: student original floor plan of Anne Frank’s room
Same student’s to scale drawing of Anne Frank’s room
Large one inch grid paper
Scissors
Pencils
Students’ floor plans of their bedrooms completed for homework

Engagement: “Yesterday we drew scale drawings of Anne Frank’s room. What is the difference between a scale drawing and the original floor plans we drew?” Students should recognize that in a scale drawing a person can tell how big an object is in comparison to other objects because the length and width are in proportion on the grid paper. Show students an example of an original floor plan that is drastically out of
proportion and that same student’s scale drawing. Ask the students, “which drawing gives you a better idea of what the room looks like and how much space the furniture takes up?” The students should recognize that the scale drawing is more accurate. Have the students take out the floor plans of their bedrooms, complete with dimensions, assigned for homework on day nine.

**Exploration/Explanation:** “Each of you drew your own bedroom and measured the furniture inside. For this project you are going to use your measurements, not the class averages. The class averages were for Anne Frank’s room since we did not know exactly what size her furniture was. For the next couple of days during class you are going to make a scale drawing of your bedroom just as we did yesterday with Anne Frank’s bedroom. Everyone will use the same scale of one inch (square) equaling ten inches.” Hand out a large piece of one inch grid paper to each student. Remind students that yesterday the grid paper was cut to scale. Anne Frank’s room was 200 inches long and so the grid paper was twenty squares long. Ask the students if everyone’s grid paper will be the same size. Why or why not? Have the students figure out how big their paper should be by counting the squares while skip counting by tens. Before any student can cut their paper they should raise their hand. The teacher will come around and check their scale dimensions. Once a student has been checked by the teacher, they can cut their grid paper. Remind the students to count the number of squares carefully before cutting. When all students have their paper cut to the correct dimensions, ask students how they know which direction their paper face. Should the longer side be vertical or should it be horizontal? Model with a student’s paper orienting the cut grid paper the same way their original floor plan was drawn. Remind students that they need to keep their paper facing the right way or their floor plan will not be drawn correctly to scale. Remind the students to also include the scale on their floor plan somewhere just as was done yesterday with the scale drawing of Anne Frank’s room. Let the students work to draw the scale drawings of their bedrooms. During this time the teacher will walk around observing students’ work, identifying problems and misconceptions, answering questions and assisting students as necessary. Otherwise, if there are numerous students struggling with the concept of drawing their room to scale, the teacher can pull this small group aside and work with them more individually. At the end of the student work time, mention that some students might need to take their original floor plans home that evening to add more details. Some students might want to measure the distance between pieces of furniture, etc.

**Evaluation:** The students’ scale drawings of their bedrooms will be evaluated at the end of the week using the attached rubric.

**Gearing up:** For students who find this easy and finish quickly, have them draw their room to scale using a different scale measurement such as one inch/ square equals one foot or twelve inches.

**Gearing down:** If the students are not yet ready to attempt individual scale drawings on their own, the teacher will provide another day of guided instruction using the same scale and the same concept of drawing a room but will provide a different floor plan with
dimensions to draw on the grid paper. The teacher will walk through the placement and
drawing of each piece of furniture asking comprehension questions throughout.
<table>
<thead>
<tr>
<th>Scale Drawing of Bedroom Rubric</th>
<th>Original Floor Plan</th>
<th>1 Turned in but late or of poor quality</th>
<th>2 Turned in on time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scale Key</td>
<td>0 No scale key</td>
<td>1 Scale key included but not accurate</td>
<td>2 Accurate scale key included</td>
</tr>
<tr>
<td>Paper cut to size</td>
<td>0 Neither length or width is correct</td>
<td>1 Either length or width is correct but not both</td>
<td>2 Both length and width are correct</td>
</tr>
<tr>
<td>Furniture Drawn to Scale</td>
<td>0 More than 8 errors</td>
<td>2 7-8 total errors</td>
<td>4 5-6 total errors</td>
</tr>
<tr>
<td>Neatness</td>
<td>0 Work is of an unacceptable quality, student rushed to get done, lines are not straight and writing is not legible</td>
<td>1 Work is below average, the student rushed to get done, less than ½ of lines are straight, writing is hard to read</td>
<td>2 Work is average quality, the student put some effort into the work, about ½ of lines are straight, writing is legible</td>
</tr>
</tbody>
</table>
Math Lesson- Day 13

Grade 4

Concept: scale drawings

State Academic Standards:

4.1.3 Round whole numbers up to 10,000 to the nearest ten, hundred, and thousand.
Example: Is 7,683 closer to 7,600 or 7,700? Explain your answer.

4.2.6 Use a standard algorithm to divide numbers up to 100 by numbers up to 10 without remainders, using relevant properties of the number system.
Example: 69 ÷ 3 = ?.

4.7.3 Apply strategies and results from simpler problems to solve more complex problems.
Example: In the first example, use your method for cubes and rectangular solids to find what happens to other prisms and to pyramids.

4.7.4 Use a variety of methods, such as words, numbers, symbols, charts, graphs, tables, diagrams, tools, and models to solve problems, justify arguments, and make conjectures.
Example: In the first example, make a table to help you explain your results to another student.

4.7.6 Recognize the relative advantages of exact and approximate solutions to problems and give answers to a specified degree of accuracy.
Example: You are telling a friend the time of a TV program. How accurate should you be: to the nearest day, hour, minute, or second?

Objectives: After drawing Anne Frank’s room to scale, the students will be able to draw scale drawings of their own bedrooms on grid paper.

Prerequisite Knowledge: knowledge of scale
Skip counting by 10s
How to read a floor plan/ drawing

Materials List: students’ floor plans drawn at home
One inch grid paper
Pencils
Rubrics

Engagement: Remind the students that they are working independently on their scale drawings of their bedrooms. Give students a copy of the rubric by which they will be evaluated. Go through it and take student questions so that all students know what they need to do to receive an A. Ask students if they have any questions about what they are
supposed to be doing, if not tell the students to get out their original floor plans and their drawings and draw, draw, draw!

**Exploration/Explanation:** As the students work the teacher will circulate throughout the room observing students’ work, identifying possible misconceptions, answering questions and assisting as necessary. If there are still some students struggling greatly with the concept, the teacher will work one on one with them or in a small group.

**Evaluation:** The students will be evaluated by rubric.

**Gearing up:** For students who find this easy and finish quickly, have them draw their room to scale using a different scale measurement such as one inch/ square equals one foot or twelve inches.

**Gearing down:** If the students are not yet ready to attempt individual scale drawings on their own, the teacher will provide another day of guided instruction using the same scale and the same concept of drawing a room but will provide a different floor plan with dimensions to draw on the grid paper. The teacher will walk through the placement and drawing of each piece of furniture asking comprehension questions throughout.
Exploration/Explanation: As the students work the teacher will circulate throughout the room observing students’ work, identifying possible misconceptions, answering questions and assisting as necessary. If there are still some students struggling greatly with the concept, the teacher will work one on one with them or in a small group.

Evaluation: The students will be evaluated by the attached rubric. When all students have turned in their completed bedroom scale drawings, the students will take out their math journals and write a paragraph describing what they have learned over the past three weeks during this math unit. If students have trouble thinking of what to write, brainstorm the activities completed over the past three weeks such as drawing a life size replica of Anne Frank’s room outside, drawing scale drawings of their bedrooms, learning about Anne Frank, etc. This should give students a starting point for recognizing what they have learned.

Gearing up: For students who find this easy and finish quickly, have them draw their room to scale using a different scale measurement such as one inch/ square equals one foot or twelve inches.

Gearing down: If individual students have trouble completing this assignment, the teacher will work one on one with these individuals to guide and assist them in drawing their bedrooms to scale.
Math Lesson- Day 14

Grade 4

Concept: scale drawings

State Academic Standards:

4.1.3 Round whole numbers up to 10,000 to the nearest ten, hundred, and thousand. Example: Is 7,683 closer to 7,600 or 7,700? Explain your answer.

4.2.6 Use a standard algorithm to divide numbers up to 100 by numbers up to 10 without remainders, using relevant properties of the number system. Example: 69 ÷ 3 = ?.

4.7.3 Apply strategies and results from simpler problems to solve more complex problems. Example: In the first example, use your method for cubes and rectangular solids to find what happens to other prisms and to pyramids.

4.7.4 Use a variety of methods, such as words, numbers, symbols, charts, graphs, tables, diagrams, tools, and models to solve problems, justify arguments, and make conjectures. Example: In the first example, make a table to help you explain your results to another student.

4.7.6 Recognize the relative advantages of exact and approximate solutions to problems and give answers to a specified degree of accuracy. Example: You are telling a friend the time of a TV program. How accurate should you be: to the nearest day, hour, minute, or second?

Objectives: After drawing Anne Frank’s room to scale, the students will be able to draw scale drawings of their own bedrooms on grid paper.

Prerequisite Knowledge: knowledge of scale
Skip counting by 10s
How to read a floor plan/ drawing

Materials List: students’ floor plans drawn at home
One inch grid paper
Pencils

Engagement: Remind the students that they are working independently on their scale drawings of their bedrooms. The teacher will review expectations of the assignment including neatness, straight lines and a scale key. Ask students if they have any questions about what they are supposed to be doing, if not tell the students to get out their original floor plans and their drawings and draw, draw, draw! Their floor plans need to be completed and turned in by the end of math today.
Closing Day Activities for the Holocaust Unit

For the culminating activity for this unit, the students will be able to go to a museum that has a focus on the Holocaust and the teaching of this topic to children. There are many different museums across the country that fit this description. Before taking students on this field trip, the teacher and class should go over the last section of the KWL entitled “What We Learned”. Before completing this section, the teacher should go over what questions and topics were brought up in the first two sections of the chart. This will allow the students to formulate their answers about what they learned from this thematic unit. The teacher should again allow all students to answer this question.

After completing the last section of the KWL chart, the students can attend the field trip. Going on a field trip as a culminating activity is extremely important for this thematic unit. This activity provides the students the opportunity to make a connection from the topics discussed in the different subjects covered in this unit. A museum will provide students the opportunity to connect with pictures, primary sources, and other artifacts that are found in various museums that discuss the topic of the Holocaust.

Instead of focusing on the museum and creating a specific guide for one museum, this guide has a list that includes numerous museums across the country that can be used to help facilitate the learning of the Holocaust in association with the integrated unit plan. Depending on what areas the school is located in Indiana, there are different museums that are more feasible to attend. Also, if this unit is adapted for a school in a different state, the teacher will be able to use one of the museums and its different special programs.
Teachers should create some type of activity sheet that has the students focus their attention to certain exhibits and artifacts during the field trip; however, the teacher should allow students enough time to explore the museum on their own. This activity sheet provides the students a basis for their research in the museum and allows the teacher to know that all students are learning and exploring topics from the museum that are related with the unit. After the field trip is over, the entire class should go over the results from the activity sheet and discuss some of the interesting things they found on their own search.

The teacher should also make certain that the parent volunteers for chaperones for the trip are current with the KWL chart and what the students have learned throughout the unit. This then provides the students another adult to help them formulate their own knowledge on this topic and no misconceptions from the volunteers.
Museums for Unit

Name of Museum: United States Holocaust Memorial Museum  
Location: Washington, D.C.  
Website/Contact Information: http://www.ushmm.org/  
Information about Museum: This museum provides many different resources online for educators to help facilitate the teaching of the Holocaust. In the actual museum itself, there are many exhibits that could be used in conjunction with this unit plan. The permanent exhibit entitled “The Holocaust” is a three floor exhibit that discusses the Holocaust as a whole, using over 900 artifacts and multimedia technology including voice narration and film footage. The only drawback to this exhibit is the age recommendation which is at least 11 years of age, in which some of the fourth grade students might be of this age at the time of the unit. One exhibit that will be on display until May 29, 2006 is entitled “Daniel’s Story”. This exhibit was created specifically for children to help them learn about the Holocaust. It was constructed by educators and others with an understanding of the development of children at the elementary age.

Name of Museum: Spertus Museum  
Location: Chicago, IL  
Website/Contact Information: http://www.spertus.edu/  
Information about Museum: The Spertus Museum contains many various exhibits ranging from many different topics concerning the Holocaust. One exhibit that would go along with the Holocaust unit entitled “Anne Frank: A History for Today”. This specific exhibit runs until May 28, 2006. This exhibit focuses on Anne Frank and her story that countless children have read from and learned about the hardships of the Nazi reign across Europe. What is especially interesting about this exhibit is its focus not only on the hardships from Anne Frank’s discrimination, but a focus on the atrocity of discrimination on any race or religion and the importance of individuals to stand up for what is right and humane. An ongoing exhibit that might be of some use for this unit would be the exhibit “Exploring the Holocaust”. One drawback to this exhibit is that it is geared towards middle and high school age students. The teacher would have to pick and choose what parts of the exhibit would be age and developmentally appropriate for the students. Another exhibit that would be interesting at the museum is entitled “ARTiFACTS Center”. This exhibit allows students to become archaeologist in search for different artifacts. They learn the process of an archaeological dig.

Name of Museum: Hebrew Jewish College-Jewish Institute of Religion (Skirball Museum)  
Location: Cincinnati, OH  
Website/Contact Information: http://www.huc.edu/museums/cnl  
Information about Museum: The Skirball Museum has many different types of exhibits that are on display in their museum. One permanent exhibit, entitled “An Eternal People: The Jewish Experience” has a focus on the Jewish religion. This exhibit has seven different sections to discuss the Jewish religion as a whole. Another interesting
exhibit from this museum is “Mapping Our Tears”. This is also a permanent exhibit in the museum focusing on the testimonials of those who were persecuted by the Nazis. This exhibit is an interactive exhibit, using multimedia testimony on a large projector system that is projected on a large screen at the front of the room. This exhibit is staged in an attic or with different artifacts from the period.
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