Module 1

How Heavy? Weight & Number

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Unit 7 Work Place Log ................................................................. T5
Combinations to Five & Equations Checkpoint ....................... T6
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Module 1
How Heavy? Weight & Number

Overview
In Module 1, students have experiences with measurement. The first three sessions focus on comparing the weights of objects, stressing the concepts of heavier and lighter. In the last two sessions students estimate and count capacity in non-standard units, with a focus on counting by 10s and 1s. Two Work Places are introduced, and two Home Connections are assigned. Warm-ups in this module focus on counting to 100.

Planner

<table>
<thead>
<tr>
<th>Session &amp; Work Places Introduced</th>
<th>P&amp;I</th>
<th>WP</th>
<th>A</th>
<th>HC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Session 1 Compare Weights</td>
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<tr>
<td>Students share what they understand about the term weight and then work together to compare the weights of several pairs of objects, using a pan balance scale. Focus is on the terms heavier and lighter. Students spend the rest of the session at Work Places.</td>
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<tr>
<td>Session 2 A Pound of Potatoes</td>
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<tr>
<td>In small groups, students search for objects that weigh as much as a one-pound sack of potatoes. They compare their objects with the potatoes on the balance scale, and place them on a graph, indicating that they are lighter than, the same as, or heavier than one pound.</td>
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<tr>
<td>Session 3 Introducing Work Place 7A Spin &amp; Compare Weights</td>
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<tr>
<td>The teacher introduces Work Place 7A. This weighing game becomes a Work Place, and students spend the rest of the session at Work Places.</td>
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<tr>
<td>Work Place 7A Spin &amp; Compare Weights</td>
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<tr>
<td>Partners take turns placing an object on one side of a balance scale. The other player spins the Spin &amp; Compare Weights Spinner and finds an object for the other side of the scale, either heavier or lighter.</td>
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<tr>
<td>Session 4 Measuring Handfuls</td>
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<tr>
<td>After estimating, counting, and recording the number of Unifix cubes in a handful, students spend the session at Work Places while the teacher conducts the Combinations to Five &amp; Equations Checkpoint.</td>
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<tr>
<td>Session 5 Introducing Work Place 7B Measuring Handfuls</td>
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<tr>
<td>The activity from the previous session is repeated, this time using a student’s handful. The activity becomes a Work Place, and students spend the rest of the session at Work Places while teacher continues the Combinations to Five &amp; Equations Checkpoint.</td>
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<tr>
<td>Work Place 7B Measuring Handfuls</td>
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<tr>
<td>The student estimates the number of cubes in a handful and records the estimate. After counting the cubes, he records the actual number. He then asks a friend to grab another handful and he repeats the activity with the friend’s handful.</td>
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</tbody>
</table>

P&I – Problems & Investigations, WP – Work Place, A – Assessment, HC – Home Connection
## Materials Preparation

Each session includes a complete list of the materials you’ll need to conduct the session, as well as notes about any preparation you’ll need to do in advance. If you would like to prepare materials ahead of time for the entire module, you can use this to-do list.

<table>
<thead>
<tr>
<th>Task</th>
<th>Done</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Copies</strong></td>
<td></td>
</tr>
<tr>
<td>Run copies of Teacher Masters T1–T8 according to the instructions at the top of each master.</td>
<td></td>
</tr>
<tr>
<td>Run a single display copy of Student Book pages 12–15.</td>
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<tr>
<td>If students do not have their own Student Books, run a class set of Student Book pages 12–15.</td>
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</tr>
<tr>
<td>If students do not have their own Home Connections books, run a class set of the assignments for this module using pages 171–177 in the Home Connections Book.</td>
<td></td>
</tr>
<tr>
<td><strong>Work Place Preparation</strong></td>
<td></td>
</tr>
<tr>
<td>Prepare the materials for Work Places 7A and 7B using the lists of materials on the Work Place Guides (Teachers Masters T3 and T6).</td>
<td></td>
</tr>
<tr>
<td><strong>Charts</strong></td>
<td></td>
</tr>
<tr>
<td>Cut the Weight Comparison Labels apart and glue each to a 12&quot; x 18&quot; piece of construction paper.</td>
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</tr>
<tr>
<td>Fold a 5' length of butcher paper in thirds to form 3 columns, unfold and make a dark line on the folds, and glue one of the Weight Graphing Labels at the top of each.</td>
<td></td>
</tr>
<tr>
<td><img src="image" alt="Weight Graphing Labels" /></td>
<td></td>
</tr>
<tr>
<td><strong>Special Items</strong></td>
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<tr>
<td>Get three pan balance scales, one prior to Session 1, and the other two prior to Session 3.</td>
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<tr>
<td>Collect three sets of 8–12 objects (small enough to fit on a balance scale) of varying weights (for example, a building block, a tennis ball, a box of crayons, a plastic toy, a whiteboard eraser, a small stuffed animal, a can of soup, a small book, and so on). One set is needed prior to Session 1. Two more sets are needed prior to Session 3.</td>
<td></td>
</tr>
<tr>
<td>Get 1 pound of potatoes (or other produce such as onions or carrots) and place in a small sack with handles prior to Session 2.</td>
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</tbody>
</table>

### Literature Connections

Suggested literature for use throughout Module 1:

- **The Dragon’s Scales** by Sarah Albee (use of a balance scale to solve weight problems)
- **Who Sank the Boat?** by Pamela Allen (introduces weight and balance experiences—students can experiment if you have a classroom water table or sink)
Session 1

Compare Weights

Summary

After the warm-up activity (rote counting to 100), the teacher introduces the topic of measuring weight. Students share what they understand about the term *weight* and then work together to compare the weights of several pairs of objects, using a pan balance scale. Focus is on the terms *heavier* and *lighter*. Students spend the rest of the session at Work Places.

Skills & Concepts

- Count to 100 by 1s (K.CC.1)
- Describe the weight of an object (K.MD.1)
- Directly compare the weights of two objects (K.MD.2)
- Describe the differences between the weights of two objects (K.MD.2)
- Classify objects into categories (K.MD.3)
- Use appropriate tools strategically (K.MP.5)
- Look for and make use of structure (K.MP.7)

Materials

<table>
<thead>
<tr>
<th>Problems &amp; Investigations</th>
<th>Kit Materials</th>
<th>Classroom Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TM T1</strong> Weight Comparison Labels (see Preparation)</td>
<td>pan balance scale</td>
<td>8–12 common classroom or household items (see Preparation)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>grocery sack or gift bag</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 pieces of 12”×18” construction paper</td>
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<tr>
<td></td>
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<td>glue stick</td>
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</tbody>
</table>

Copy instructions are located at the top of each teacher master.

Vocabulary

An asterisk [*] identifies those terms for which Word Resource Cards are available.

- compare*
- equal*
- heavy/heavier/heaviest*
- light/lighter/lightest*
- measure
- weight*

Preparation

- Cut the two Weight Comparison Labels apart and glue each to a 12”×18” piece of construction paper.
- Place 8–12 small objects of varying weights (such as a building block, a tennis ball, a box of crayons, a plastic toy, a whiteboard eraser, a small stuffed animal, a can of soup, a small book, and so on) in a grocery sack or gift bag.
Problems and Investigations

Compare Weights

1. Warm-up: With students gathered in the discussion circle, lead them in rote counting to 100, throwing both hands (with 10 fingers spread out) up into the air each time you reach a 10.

   *A slight pause just before you get to the next 10 will signal them to get ready for the “hands up:” 15, 16, 17, 18, 19... 20!*

2. Introduce the session.
   - Display the pan balance scale and explain that you’re going to use it to compare the weights of some objects today.
   - Ask students to share what they know about the word weight, and what it means to measure weight.

   *Students* Is that how heavy something is?
   *My mom’s always saying she weighs too much.*
   *You get on the scale and it tells how many pounds.*
   *The nurse weighed me on a big scale and I weigh 46 pounds.*
   *That scale will show if something’s heavier than something else, but it doesn’t have any numbers.*

   **Support** Some students may not have seen or used a balance scale before. Demonstrate what happens when you push on one side with your hand, and how it balances itself again. Some may need to try it for themselves.

3. Now show students the bag of objects. Pull something out of the bag, and then have a student pull out a second object.

4. Place both objects in the middle of the circle and have students use the think-pair-share routine to discuss the following: Which of these two objects do you think is heavier?
   - Have students think quietly for a bit and then share with a partner for a moment.
   - Randomly select several students to share their thinking with the class.

   *Students* The can is heavier, because cans like that are always heavy.
   *But the boat is bigger, so maybe it’s heavier.*
   *I think the can will make the scale go down more because that boat is just plastic.*

   **ELL** Demonstrate the word heavier by pretending you are weighed down by a very heavy object. You might want to have a heavy object handy to help with the demonstration. For the word lighter, pretend that you are holding something very light, perhaps holding your hands up high and standing on tiptoes.

5. Ask your helper to compare the two objects by holding one in each hand. Which one feels heavier?

6. Explain that you’re going to use the scale to check, and ask students to show with their arms how they think the scale will look after you’ve placed the objects on each side of the scale.
Have the student place his object on one side of the scale and, after a moment, place your object on the other side. Reinforce the idea that one object is heavier and one object is lighter.

Abeya  Look! His side of the scale went down!
Teacher  Now I’ll put the can on my side of the scale.
Becca  Wow! Teacher’s side is way down to the floor now. That can is heavy!
Teacher  The can is heavier. The boat doesn’t weigh as much—it’s lighter.

Show students the weight comparison mats you’ve prepared, discuss the labels, and place each object on the appropriate mat for a moment.
Teacher: Let’s take a look at our mats. What do you think these labels say?

Students: That one has an elephant and they’re heavy! That must be for the heavy things.

And that word begins with “h.” Does it say “heavy?”

Teacher: Good thinking! The elephant is very heavy, and the word is “heavier.” This mat is for the heavier object.

Students: That’s the can.

Teacher: So what about the label on the other mat?

Students: I’ll bet it says “lighter.”

Yeah, and there’s a little mouse on there. A mouse is pretty light.

9 Remove the two objects from the mats, choose a new helper, and repeat steps 3–8 with another pair of objects from the sack.

• You need to have just one item at a time on each mat. Having a number of objects of varying weights on one mat would be confusing, since they would not all be lighter or heavier than all of the objects on the other mat.

• Be sure to use the terms heavier and lighter throughout the discussion, and encourage students to do so as well.

• If two of the objects pulled from the sack turn out to balance each other perfectly on the scale, take the opportunity to discuss the idea that some objects weigh the same or equal amounts.

Support: Some kindergartners may confuse weight with size, assuming that a bigger object will weigh more. Most will realize the difference through this and other weight-related activities. If some students persist in this belief, give them several opportunities to hold a larger, lighter object in one hand and a smaller, heavier object in the other hand.

10 Choose other helpers and repeat steps 3–8 with more pairs of objects from the sack.

11 Close this part of the session by telling students they will have more opportunities for learning about weight in the coming days.

Work Places

12 Invite students to spend the rest of the session at Work Places. Explain that the Spin & Count Shapes Work Place will only be available for another couple of days.

• Shuffle the name cards.

• Call students’ names and have them place their cards in the Work Places chart.

While they do Work Places, circulate around the room to make observations and provide differentiation. The Work Place Guides include suggestions for differentiating the activities to meet students’ needs.

13 Close the session.

• Give students a few minutes of warning before clean-up time.

• Have students clean up and put away the Work Place materials.

Ongoing Assessment

The Kindergarten Assessment Guide includes a Work Places Differentiation Chart for each unit. If you like, you can use these charts to make notes about which students need support or challenge with the skills featured in each Work Place.

Extension

Return the objects to the sack. Set up the sack, the balance scale, and the weight comparison mats as a Work Place option and let students revisit the activity on their own. You can keep students’ interest high by periodically changing the objects in the sack.

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Session 2

A Pound of Potatoes

Summary
After the warm-up activity (choral counting to 100 from 50), the teacher works with groups of students while the others are at Work Places. The students search for objects around the classroom that weigh as much as a one-pound sack of potatoes. They compare their objects with the potatoes on the pan balance scale, and place them on a graph, indicating that they are lighter than, the same as, or heavier than one pound. They record the results on a record sheet. The How Many in a Pound? Home Connection is assigned.

Skills & Concepts
- Count to 100 by 1s (K.CC.1)
- Describe the weight of an object (K.MD.1)
- Directly compare the weights of two objects (K.MD.2)
- Describe the differences between the weights of two objects (K.MD.2)
- Classify objects into categories and count the number of objects in different categories (K.MD.3)
- Use appropriate tools strategically (K.MP.5)
- Look for and make use of structure (K.MP.7)

Materials

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<tr>
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</thead>
<tbody>
<tr>
<td>Problems &amp; Investigations</td>
<td>A Pound of Potatoes</td>
<td></td>
</tr>
<tr>
<td>TM T2</td>
<td>Weight Graphing Labels (see Preparation)</td>
<td>• 5’ length of butcher paper (see Preparation)</td>
</tr>
<tr>
<td>SB 13–14*</td>
<td>A Pound of Potatoes</td>
<td>• 1 pound of potatoes (or other produce such as onions or carrots) in a small sack with handles</td>
</tr>
<tr>
<td>Work Places in Use</td>
<td></td>
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<tr>
<td>5E Spin &amp; Count Shapes (introduced in Unit 5, Module 3, Session 3)</td>
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<tr>
<td>5F Hungry Caterpillars (introduced in Unit 5, Module 3, Session 5)</td>
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<tr>
<td>6A Build Two shapes (introduced in Unit 6, Module 2, Session 3)</td>
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<td>6B What’s My Rule? (introduced in Unit 6, Module 2, Session 4)</td>
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<td>6C Make It Five (introduced in Unit 6, Module 2, Session 5)</td>
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<tr>
<td>6D Roll, Add &amp; Compare (introduced in Unit 6, Module 3, Session 3)</td>
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<tr>
<td>Home Connection</td>
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<tr>
<td>HC 173–175</td>
<td>How Many in a Pound?</td>
<td></td>
</tr>
</tbody>
</table>

Vocabulary
An asterisk [*] identifies those terms for which Word Resource Cards are available.
- compare*
- equal*
- heavy/heavier/heaviest*
- light/lighter/lightest*
- measure
- weight*

Preparation
- Fold the butcher paper in thirds to form three columns. Unfold the paper and draw a dark line on the folds. Glue one of the Weight Graphing Labels to the top of each column.
- You will work with small groups of students today while the others are at Work Places. Decide ahead of time how many students you will have in each group. Suggested group size is 8–10 students. Depending on the size of your class, you could simply divide your students into two or three groups.
Problems and Investigations

A Pound of Potatoes

1. With students gathered in your discussion circle, start at 50 and choral count to 100.

2. Open the session by showing the students your sack and explaining that you went shopping the other day and bought a pound of potatoes.
   - Take the potatoes out of the sack one by one so they can see how many it took to make a pound when you weighed them on the scale at the store.
   - Give students a minute or two to share similar experiences.
     » Have they seen a scale in the produce department at the store?
     » Have they helped weigh potatoes, onions, apples, bananas, or other vegetables or fruits on one of those scales?
     » Do they know what a pound of something feels like?

3. Tell students that you are going to use the sack of potatoes to do some weighing work with groups of students, one group at a time, and that they will be in Work Places when they are not in the group with you.

4. Send most of the students to Work Places, and keep one group behind in the circle.

5. Put the potatoes back in the sack, and pass the sack around. How does it feel? Light or heavy?

6. Have students leave the group and search the room for something they think is about the same weight as the sack of potatoes, then sit back down in the circle with the object.

7. When all the students in the group are seated again with their objects, show them the graph you have started on the butcher paper.
   - Discuss the words and pictures.
   - Explain that you are going to compare their objects with the sack of potatoes and place them in the appropriate column on the graph.

8. Place the sack of potatoes on one side of your pan balance scale. Then compare each student’s object with the potatoes, stressing the terms heavier, lighter, and exactly the same.

Timing
In order to have time to work with every student in groups, keep the introductory part of the session to 5 minutes.
Divide the other 45 minutes of session time by the number of groups.
For example, if you have three groups, work with each group for no more than 15 minutes.

Literature Connections
Any version of the book Stone Soup would be a fun read-aloud today. See the Extensions suggestions for a fun classroom activity.
Give each student a turn to place the chosen object on the other side of the scale and compare it with the potatoes.

» How does the object compare?
» Is it heavier, lighter, or exactly the same as the sack of potatoes?
» How do you know?

*Students* The block is heavier than the potatoes.
I knew it. Those really big blocks are heavy!
The scale is tipped down on the block’s side. That means it’s heavier.

Have the student place the object in the appropriate column on the graph.

9 When all the objects have been weighed and graphed, have students locate the Student Book page, A Pound of Potatoes.

10 Discuss and record the results of their graphing.

*Teacher* Are there more objects that are heavier than, lighter than, or the same as the one-pound sack of potatoes? Let’s count them to be sure.

Have students enter the number in each section on their Pound of Potatoes graph. (For example, if there are 3 items on the Heavier Than 1 Pound section of the class graph, students write “3” in that section on their own graph.)

11 Have students draw the sack of potatoes in the middle section of their graph, one object that is heavier than the potatoes in the Heavier Than 1 Pound section, and one object that is lighter than the potatoes in the Lighter Than 1 Pound section.

12 Give students instructions for the second page, complete the first item together, and let them finish the page independently.

13 Have students return their objects and go to Work Places.

14 Repeat this activity (steps 5–12) with other groups until each student has had a chance to participate.
Work Places

15 All students will be at Work Places when they are not in the small group with you.

16 Close the session.
   • Give students a few minutes of warning before clean-up time.
   • Have students clean up and put away the Work Place materials.

Home Connection

17 Introduce and assign the How Many in a Pound? Home Connection, which provides more practice with the following skills:
   • Describe the weight of an object (K.MD.1)
   • Directly compare the weights of two objects (K.MD.2)
   • Describe the differences between the weights of two objects (K.MD.2)
   • Classify objects into categories and count the number of objects in different categories (K.MD.3)

Discuss the following points with students:
   • Explain to students that they will want to plan with their families when they can make a trip to the grocery store.
   • Note the produce scale in the picture and how it is different from the balance scale. Students will want to get the scale to point to 1 or close to it.

Extensions
   • Set up the sack of potatoes, the balance scale, and the graph as a Work Place option. Clear the graph each day and let students build it anew, finding objects around the room that are heavier than, lighter than, or exactly the same as a pound.
   • Ask students to find out how many of a particular object it takes to equal the pound of potatoes exactly. Can they find out how many alphabet blocks they have to place on one side of the balance scale to equal the weight of the potatoes on the other? How many unit blocks does it take? How many large plastic dinosaurs does it take? A few children might enjoy keeping a written record of their discoveries.
   • Bring in carrots, onions, and celery, and have students use the balance scale and the pound of potatoes to weigh out a pound of each of these other ingredients. Then read Stone Soup and use all the vegetables, along with any other ingredients you want, to make soup with the class.
Session 3

Introducing Work Place 7A Spin & Compare Weights

Summary
After the warm-up activity (choral counting to 100 from 75), the teacher introduces a new weighing game. Students and teacher take turns placing an object on one side of the balance scale, while the other team spins the Spin & Compare Weights Spinner to see whether they need to find a heavier or lighter object for the other side of the scale. Spin & Compare Weights becomes a Work Place, and students spend the rest of the session at Work Places.

Skills & Concepts
• Count to 100 by 1s (K.CC.1)
• Describe the weight of an object (K.MD.1)
• Directly compare the weights of two objects (K.MD.2)
• Describe the differences between the weights of two objects (K.MD.2)
• Classify objects into categories and count the number of objects in different categories (K.MD.3)
• Use appropriate tools strategically (K.MP.5)
• Look for and make use of structure (K.MP.7)

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<tbody>
<tr>
<td>Work Places</td>
<td>Introducing Work Place 7A Spin &amp; Compare Weights</td>
<td></td>
</tr>
<tr>
<td>TM T3</td>
<td>• Spin &amp; Compare Weights Spinner</td>
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<tr>
<td>Work Place Guide 7A Spin &amp; Compare Weights</td>
<td></td>
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<tr>
<td>TM T4</td>
<td>• 7A Spin &amp; Compare Weights Menu Card</td>
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<tr>
<td>Work Place Instructions 7A Spin &amp; Compare Weights</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TM T5</td>
<td>• pan balance scale</td>
<td></td>
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<tr>
<td>Unit 7 Work Place Log</td>
<td>• 8–12 common classroom or household items of varying weights on a tray or in a basket</td>
<td></td>
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</tbody>
</table>

Work Places in Use

5F  Hungry Caterpillars (introduced in Unit 5, Module 3, Session 5)
6A  Build Two Shapes (introduced in Unit 6, Module 2, Session 3)
6B  What’s My Rule? (introduced in Unit 6, Module 2, Session 4)
6C  Make It Five (introduced in Unit 6, Module 2, Session 5)
6D  Roll, Add & Compare (introduced in Unit 6, Module 3, Session 3)
7A  Spin & Compare Weights (introduced in this session)

HC – Home Connection, SB – Student Book, TM – Teacher Master
Copy instructions are located at the top of each teacher master.

Preparation
• If you’re using Work Place folders with your students, remove the oldest Work Place Log (Unit 5) from the Work Place folders and place it inside the folders, as some of the Unit 5 Work Places are still being used. Attach the Unit 7 Work Place Log to the folder.
• In today’s session, you’ll introduce Work Place 7A Spin & Compare Weights. Before this session, you should look over the Work Place Guide and the Work Place Instructions, and assemble the bin for Work Place 7A, using the materials listed on the Guide. The Work Place Guide also includes suggestions for differentiating the game to meet students’ needs.
• Remove Work Place 5E and add Work Place 7A, and replace the Menu Card for 5E with the Menu Card for 7A in the Work Place pocket chart.

Vocabulary
An asterisk [*] identifies those terms for which Word Resource Cards are available.
compare*, equal*, heavy/heavier/heaviest*, light/lighter/lightest*, measure*, weight*
Introducing Work Place 7A Spin & Compare Weights

1. With students seated in a circle in your discussion area, start at 75 and choral count to 100.

2. Open the session by explaining that you’re going to play a weighing game with them, and showing them the materials.
   - Place the pan balance scale and tray of objects in the middle of the circle, but still within your reach.
   - Show them the Spin & Compare Weights Spinner, and discuss what the words say.
   **SUPPORT AND ELL** Again, demonstrate the meaning of the words with body language. Pretend you are weighed down with a heavy burden for heavier, and act like you’re holding something light as a feather for lighter.

3. Summarize the game.
   One player places an object on one side of a balance scale. Then the other player spins the Spin & Compare Weights Spinner to see if he needs to find an object for the other side of the scale that is heavier or lighter.

4. Play the game, following the directions on Work Place Instructions 7A Spin & Compare Weights.
   - Take the first turn and choose an object that’s lighter than some of the items on the tray, but heavier than others.
   - Invite students to spin the spinner and select objects for the class turn.
   - When a player places an item on the balance scale and declares it heavier or lighter, ask, “How do you know?”

5. Tell students that this will now become a partner game in Work Places, and will give them opportunities to practice finding heavier and lighter objects.

6. Encourage students to bring objects from home, with parent permission of course, to add to the class collection.

7. Show students the contents of the Work Place bin and the new Menu Card.

8. Invite students to spend the rest of the session at Work Places.
   - Shuffle the name cards.
   - Call students’ names and have them place their cards in the Work Places chart.

9. Close the session.
   - Give students a few minutes of warning before clean-up time.
   - Have students clean up and put away the Work Place materials.
Session 4
Measuring Handfuls

Summary
After the warm-up activity (choral counting to 100 from 88), the teacher estimates the number of Unifix cubes in a handful. The teacher and students write the number and color in ten-frames on a record sheet. The cubes are counted on Numbers to Ten Counting Mats, and then the teacher and students color in another set of ten-frames and record the actual number. Another part of the record sheet has students determining how many more to make five. Students spend the rest of the session at Work Places, while the teacher conducts the Combinations to Five & Equations Checkpoint.

Skills & Concepts
• Count to 100 by 1s (K.CC.1)
• Write numerals from 0–20 to represent a number of objects (K.CC.3)
• Count up to 20 objects arranged in a line, rectangular array, or circle to answer “how many?” questions (K.CC.5)
• Decompose numbers less than or equal to 10 into pairs in more than one way and record decompositions with equations (K.OA.3)
• Use a drawing to represent the ten and ones in any number from 11 to 19 (K.NBT.1)
• Reason abstractly and quantitatively (K.MP.2)
• Look for and make use of structure (K.MP.7)

Materials

<table>
<thead>
<tr>
<th>Copies</th>
<th>Kit Materials</th>
<th>Classroom Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problems &amp; Investigations</td>
<td>Measuring Handfuls</td>
<td></td>
</tr>
<tr>
<td>SB 15* Measuring Handfuls SB 16* How Many to Make Five?</td>
<td>• 5 Numbers to Ten Counting Mats</td>
<td>• container of loose Unifix cubes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• crayons, 1 per student</td>
</tr>
</tbody>
</table>

Work Places in Use

5F Hungry Caterpillars (introduced in Unit 5, Module 3, Session 5)
6A Build Two Shapes (introduced in Unit 6, Module 2, Session 3)
6B What’s My Rule? (introduced in Unit 6, Module 2, Session 4)
6C Make It Five (introduced in Unit 6, Module 2, Session 5)
6D Roll, Add & Compare (introduced in Unit 6, Module 3, Session 3)
7A Spin & Compare Weights (introduced in Unit 7, Module 1, Session 3)

Assessment

TM T6 Combinations to Five & Equations Checkpoint • small pieces of paper, class set

HC – Home Connection, SB – Student Book, TM – Teacher Master
Copy instructions are located at the top of each teacher master. *Run 1 copy of this page for display.

Vocabulary
An asterisk [*] identifies those terms for which Word Resource Cards are available.
compare*
estimate*
number*
one*
strategies*
tens*
Problems and Investigations

Measuring Handfuls

1 Warm-up: With students seated in a circle in your discussion area, start at 88 and choral count to 100.

2 Open the session by setting out the container of Unifix cubes and four or five Numbers to Ten Counting Mats (ten-frame side showing) on the floor, and briefly discussing what students remember about the counting mats.

3 Invite a student to take a big handful (one hand only) of Unifix cubes from the container and set them in a pile in the middle of the circle.
   The idea is to use estimation, so you don't want the cubes to be easily countable. You also want to move along rather quickly, lessening the opportunity to count the cubes.

4 Ask students to estimate how many mats they think it will take to hold all of the Unifix cubes in the pile and how many cubes there are in all.
   ELL Indicate what you mean by pointing to the pile with a puzzled expression and asking, “How many?”
   Don’t be surprised if some of your students still volunteer estimates that are completely unreasonable. Wishful thinking can skew their reasoning immensely, and many kindergartners are only beginning to understand quantities greater than 10.

   Teacher Wow, you managed to get quite a few! Let’s take a look at our counting mats. If we fill these mats with the cubes, how many mats do you think we’ll need?
   Students Maybe three mats.
   Maybe it’s one mat.
   It’s more than that. I think we’ll need all the mats.
   I don’t think you could grab that many in your hand—I think it’s one mat and some more.
   Teacher You’re making some very good estimates. Let’s find out.

5 Have a couple of students work together to set the cubes out on counting mats.

6 After all of the cubes are placed on mats, ask students to figure out exactly how many there are.
   • After 10 or 15 seconds of quiet thinking, have them pair-share their ideas with a neighbor.
   • Then invite them to share their counting strategies with the group.
**Students** It’s more than a mat and a mat holds 10.
Yeah, there are 2 extras.
That’s 10 plus 2 and that makes 12!
I just counted—1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12!
There are some 5s, too—2 fives and 2 extras.

**SUPPORT** As students figure this out, you may hear some who still count by 1s to get an answer. After these students complete their counting, ask, “Do you know another way to count the cubes?”

7 After some discussion, rephrase students’ strategies in ways that point out the various methods of counting.

**Teacher** I heard a lot of strategies for counting the cubes. Some of you counted by 1s. Some of you noticed that it was 10 and some more. Some of you said that there were 10 and 2. You even noticed that it was filling some 5s on the ten-frame.

8 Have students return to their seats, where they can see the projector screen, and locate the Measuring Handfuls Student Book page and a crayon.

9 Display your copy of the Measuring Handfuls Student Book page and ask for observations.

10 Explain how you’ll use this page.

**We’re only using the top half today. I’ll take a handful of cubes and estimate how many there are. We can all color in the mats at the top of the page and write the number. Then we’ll place the cubes on some mats and count them. Then we’ll color in the next group of mats on the page and write the actual number.**

11 Take a handful of cubes and demonstrate the estimation process.

**Teacher** I have to estimate how many cubes I pulled out. That means I will use my best guess. Hmm, I wonder if they’ll fill up two mats. It doesn’t look like it’s quite that many, but close. I’m going to say 18. (Do this quickly so students see that you’re not counting the cubes.)

12 Now ask the class to join you in coloring in the estimated number of cubes on the first set of mats on the record sheet and writing the estimate.

**Teacher** Now let’s all color in 18. We can fill up one whole ten-frame—that’s 10. (Everyone colors in a ten-frame.) Now how many more do we need to color?

**Chase** I think it’s 8, because 10 and 8 is 18.

**Darien** 10… 11, 12, 13, 14, 15, 16, 17, 18 (counts as coloring in)—yep, it’s 8 more.

**Teacher** OK, and my estimate was 18, so let’s all write 18 here where it says, “My estimate.”

**CHALLENGE** Ask students, “How many more to make 10 (or 20, or whatever happens to be the next decade)?”
13 Have a couple of students place the cubes on Numbers to Ten Counting Mats, and then count them with the students’ help, color them in on the record sheet, and record the actual number.

Teacher So, how did it turn out?
Dane You were right that it wasn’t two mats.
Teacher How many did I actually get in my handful?
Callie It’s 10 and 6 more—that’s 16!
Teacher What was my estimate?
Students Eighteen.
Teacher That was a pretty good estimate. I didn’t miss by very much.
Let’s show how many it actually was on the record sheet. We need to fill in 16 — what will that look like?
Thanh A ten-frame all filled in and then 6 more.
Teacher Yes, so let’s all do that. (Colors in 16.) Now let’s write 16 where it says, “The actual number.”

CHALLENGE Ask students, “How many more to make 10 (or 20, or whatever happens to be the next decade)?” or “Which was greater, the estimate or the actual number? How much greater?”

14 Guide students in completing the How Many to Make Five? Student Book page, which shows groups of Unifix cubes and asks students to determine how many more it would take to make five.

- Read the directions and complete the first four problems with students.
- Read the directions for the last item, explain as necessary, and have students complete it.

SUPPORT For some students, this is still a bit too abstract. Encourage them to draw the cubes that are necessary to make 5.

15 To close this part of the session, tell students you’ll play this estimation game again tomorrow, using the bottom half of the Measuring Handfuls Student Book page, and then Measuring Handfuls will become a Work Place.

16 Keep your copy of the Measuring Handfuls Student Book page for the next session, saving what you have filled in. Students need to save their pages as well.

17 Tell students that during Work Places, you will be in assessment mode and cannot be interrupted.

- Put on your assessment hat or coat.
- Explain that you will call them one at a time so they can show you what they know about combinations to 5.
**Work Places**

18 Invite students to spend the rest of the session at Work Places.
   - Shuffle the name cards.
   - Call students’ names and have them place their cards in the Work Places chart.

**Assessment**

**Combinations to Five & Equations Checkpoint**

19 While students are engaged in Work Places, today and over the next few days to come, use the time for the Combinations to Five & Equations Checkpoint, which you will administer to one student at a time.

This checkpoint focuses on the following skills and concepts:
   - Represent addition with equations (K.OA.1)
   - Fluently add with sums to 5 (K.OA.5)

20 Call one student at a time and administer the checkpoint. Ask the first three questions on the Combinations to Five & Equations Checkpoint Teacher Master and then have the student write the response to the fourth prompt.

   - Assessing each student should only take a few minutes.
   - Observe students as they are determining the answer to understand if they know the combinations automatically, count, or use their fingers to answer.

21 Record your observations on the Combinations to Five & Equations Checkpoint Teacher Master.

22 Use the results of your observations to plan differentiated activities for your students.

23 Close the session.
   - Give students a few minutes of warning before clean-up time.
   - Have students clean up and put away the Work Place materials.
Session 5
Introducing Work Place 7B Measuring Handfuls

Summary
After the warm-up activity (choral counting back to 0 from 30), a student volunteer grabs a handful of Unifix cubes, and the teacher estimates the quantity. The teacher and students color in ten-frames and write the number on a record sheet. The cubes are counted on Numbers to Ten Counting Mats, and then the teacher and students color in another set of ten-frames and record the actual number. The activity becomes a Work Place, and students spend the rest of the session at Work Places while the teacher continues the Combinations to Five & Equations Checkpoint. The Fill It to Five Home Connection is assigned.

Skills & Concepts
- Write numerals from 0–20 to represent a number of objects (K.CC.3)
- Count up to 20 objects arranged in a line, rectangular array, or circle to answer “how many?” questions (K.CC.5)
- Use a drawing to represent the ten and ones in any number from 11 to 19 (K.NBT.1)
- Reason abstractly and quantitatively (K.MP.2)
- Look for and make use of structure (K.MP.7)

Materials

<table>
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<tr>
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<th>Classroom Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Work Places</strong> Introducing Work Place 7B Measuring Handfuls</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SB 15</td>
<td>• 5 Numbers to Ten Counting Mats, Ten-Frame side</td>
<td></td>
</tr>
<tr>
<td>TM T7</td>
<td>• 7B Measuring Handfuls Menu Card</td>
<td></td>
</tr>
<tr>
<td>TM T8</td>
<td>• Unifix cubes</td>
<td></td>
</tr>
<tr>
<td>TM T9</td>
<td>• crayons, 1 per student</td>
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</tbody>
</table>

Work Places in Use
- 6A Build Two Shapes (introduced in Unit 6, Module 2, Session 3)
- 6B What’s My Rule? (introduced in Unit 6, Module 2, Session 4)
- 6C Make It Five (introduced in Unit 6, Module 2, Session 5)
- 6D Roll, Add & Compare (introduced in Unit 6, Module 3, Session 3)
- 7A Spin & Compare Weights (introduced in Unit 7, Module 1, Session 3)
- 7B Measuring Handfuls (introduced in this session)

Home Connection
- HC 177–179
  Fill It to Five

Vocabulary
An asterisk [*] identifies those terms for which Word Resource Cards are available.

compare*
estimate*
number*
ones*
strategies
tens*

Preparation
- In today’s session, you’ll introduce Work Place 7B Measuring Handfuls. Before this session, you should review the Work Place Guide and the Work Place Instructions, and assemble the bin for Work Place 7B, using the materials listed on the Guide. The Work Place Guide also includes suggestions for differentiating the activity to meet students’ needs.
- Remove Work Place 5F and add Work Place 7B, and replace the Menu Card for 5F with the Menu Card for 7B in the Work Place pocket chart.
Work Places

Introducing Work Place 7B Measuring Handfuls

1. With students seated where they can see the projector screen, start at 30 and choral count back to 0.

2. Display your copy of the Measuring Handfuls Student Book page that includes the work done in the previous session. Briefly review what you did, and explain what you will do today.

   Teacher: Do you remember how I estimated that I had 18 Unifix cubes in my handful, and the actual number was 16? At the bottom of the record sheet there’s a place to do it again, but I don’t want to get the same number again, so I’m going to have a student grab a handful.

3. Have students locate their Measuring Handfuls Student Book page from the previous session and a crayon.

4. Invite a student to grab a handful of cubes and place them in a pile on the display area.

5. Hold up a couple of Numbers to Ten Counting Mats, Ten-Frame side up, and ask for estimates of the number of counting mats it will take to set out all the cubes.

   ELL: Indicate what you mean by pointing to the mats with a puzzled expression and asking, “How many?”

   Teacher: That’s a big handful! Let’s take a look at our counting mats. If we fill these mats with the cubes, how many mats do you think we’ll need?

   Students: Maybe two.
   It’s either one or two.
   I think it’ll take one mat and a little bit of another mat.
   I think it’s more, closer to two mats.

6. After students share their estimates, have your helper write her name in the box where it says, “______’s handful,” while you decide your estimate. Emphasize how prior experience can help you make a good choice.

   Teacher: Let’s see. I think your hand is a little smaller than mine, so I don’t think you got 16. I think you might have picked up 12, like a student did yesterday. That’s a little more than one mat. I’ll color my estimate here on my page and write the number 12. All of you can do that on your page, too.

7. Color in the first set of mats in the lower half of the Measuring Handfuls Student Book page to indicate the estimated number of cubes, and write the number, as students do the same.

   CHALLENGE: Ask students, “How many more to make 10 (or 20, or whatever happens to be the next decade)?
8 Have your helper count out the Unifix cubes onto the mats. Ask students to figure out exactly how many cubes there are.
   • After 10 or 15 seconds of quiet thinking, have them pair-share their ideas with a neighbor.
   • Then invite them to share their counting strategies with the group.

   **Students** You were right—it’s a little more than a mat!
   Yeah, it’s a mat—that’s 10—and 3 more, so that’s 13.
   I just counted—1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13!
   I knew 10 plus 3 was 13.

9 Record the results, coloring in the actual number of cubes in the final set of mats on the Measuring Handfuls Student Book page and writing the number, while students do the same.

   ![Image of Unifix cubes]
   How many Unifix cubes in Danielle’s handful?
   My estimate 12
   The actual number 13

   **CHALLENGE** Ask students, “How many more to make 10 (or 20, or whatever happens to be the next decade)?

   Reinforce the importance of using previous information to make a reasonable estimate.

   **Teacher** I’m pretty happy with my estimate of 12. It’s very close to 13.
   It really helped to know that there were 16 in my handful and that the student’s hand was smaller than mine.

10 Explain how they will use a record sheet just like this at a new Work Place.

   **Teacher** You’ll take a handful of Unifix cubes, estimate how many there are, color in the mats at the top of the page, and write the number.
   Then you’ll place the cubes on some mats and count them, and then color in the next group of mats to show the actual number, and then write the number. For the bottom half of the page, you can ask a friend to grab a handful of cubes so you can do the same thing again.

   Some students will be confused and think that they are working with a partner and taking turns. Emphasize that the only thing the friend is doing is grabbing a handful of cubes.

11 Show students the contents of the Work Place bin and the new Menu Card.

12 You will want to spend time at this Work Place when you can for the next few days. These are complex tasks, and students will need guidance.
13  Invite students to spend the rest of the session at Work Places. Continue with the Combinations to Five & Equations Checkpoint if you did not finish in the previous session.
   •  Shuffle the name cards.
   •  Call students’ names and have them place their cards in the Work Places chart.

14  Close the session.
   •  Give students a few minutes of warning before clean-up time.
   •  Have students clean up and put away the Work Place materials.

Home Connection

15  Introduce and assign the Fill It to Five Home Connection, which provides more practice with the following skills:
   •  Represent addition with equations (K.OA.1)
   •  Add with sums to 10 (K.OA.2)
Weight Comparison Labels

heavier

lighter
Weight Graphing Labels

Lighter than 1 Pound

Exactly 1 Pound

Heavier than 1 Pound
Work Place Guide 7A Spin & Compare Weights

Summary
Partners take turns placing an object on one side of a balance scale, while the other player spins the Spin & Compare Weights Spinner and finds an object for the other side of the scale, either heavier or lighter.

Skills & Concepts
- Describe the weight of an object (K.MD.1)
- Directly compare the weights of two objects (K.MD.2)
- Describe the differences between the weights of two objects (K.MD.2)
- Classify objects into categories and count the number of objects in different categories (K.MD.3)

Materials

<table>
<thead>
<tr>
<th>Copies</th>
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<th>Classroom Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>TM T3</td>
<td>3 Spin &amp; Compare Weights Spinners</td>
<td>3 containers of 8–12 common classroom or household items of varying weights</td>
</tr>
<tr>
<td>TM T4</td>
<td>3 Spin &amp; Compare Weights Spinners</td>
<td>3 pan balance scales</td>
</tr>
</tbody>
</table>

Assessment & Differentiation
Here are some quick observational assessments you can make as students begin to play this game on their own. Use the results to differentiate as needed.

<table>
<thead>
<tr>
<th>If you see that…</th>
<th>Differentiate</th>
</tr>
</thead>
<tbody>
<tr>
<td>A student has difficulty determining which object is heavier or lighter than the one on the balance scale.</td>
<td>SUPPORT Have the student hold the original object in one hand and a second object in the other hand so they can feel which is heavier and lighter.</td>
</tr>
<tr>
<td>A student or pair of students easily determines which objects are heavier and lighter.</td>
<td>CHALLENGE Invite students to play one of the game variations.</td>
</tr>
</tbody>
</table>

English-Language Learners Use the following adaptations to support the ELL students in your classroom.

Stress the words heavier and lighter. When the spinner is spun, point to the picture of the elephant or the mouse and say the word. Press the open end of the balance scale down to indicate that they need an object that is heavier, and push it up to indicate that they need an object that is lighter.
Work Place Instructions 7A Spin & Compare Weights

Each pair of players needs:
- 1 Spin & Compare Weights Spinner
- 1 set of objects to weigh
- 1 pan balance scale

1. One player places an object from the collection on one side of the balance scale.
2. The second player spins the Spin & Compare Weights Spinner and selects an object that matches what it says on the spinner (heavier or lighter) to place on the other side of the balance scale.

3. If the object is indeed heavier/lighter, both objects are removed and set aside. If the object is not heavier/lighter, the player tries other objects until one works.
4. If a player spins something that’s not possible (such as spinning lighter when there are no more lighter objects), that player should spin again.
5. Players switch roles and repeat steps 2–4.
6. Play continues until all the objects have been used.

Game Variations
A. Students find two objects that equal the weight of the object on the other side of the balance scale.
B. Students estimate how many Unifix cubes it would take to equal the weight of an object, and then try it out. (Unifix cubes would work only with some of the lighter objects. Other measuring materials might be used for heavier objects.)
Unit 7 Work Place Log

7A Spin & Compare Weights

7B Measuring Handfuls

7C Capture the Number

7D Double Top Draw

Personal Practice

Computer Activity

Work with the Teacher
### Combinations to Five & Equations Checkpoint

**Materials**
- a small piece of paper for each student
- a pencil for each student

**Have available:**
- Unifix cubes
- five-frames
- a number line

**Instructions**
- This is an individual interview that should take no more than a very few minutes per student.
- Administer the first three questions orally, and check the box that best describes the student’s response.
- Give the student a piece of paper and pencil and conduct the last prompt.

**Student Name**

<table>
<thead>
<tr>
<th>Question 1</th>
<th>Question 2</th>
<th>Question 3</th>
<th>Prompt 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>“What goes with 3 to make 5?”</td>
<td>“Can you tell me two other numbers that make 5?”</td>
<td>“What goes with 2 to make 4?”</td>
<td>Say, “Write the equation that describes the combination 2 plus 2 equals 4.”</td>
</tr>
</tbody>
</table>

**Combinations to 5**
- Fluently add with sums to 5
  - K.OA.5

**Write Equations**
- Represent addition with equations
  - K.OA.1

**Accurately writes equation and includes the sum**

**Writes an incomplete equation (e.g., omits equal sign)**

**Unable to write the equation**

*Objects can include fingers, cubes, number lines, five-frames, etc.*
**Work Place Guide 7B Measuring Handfuls**

**Summary**
The student takes a handful of Unifix cubes, estimates the number of cubes in the handful, records the estimate, and colors in ten-frames on a record sheet. She then counts the cubes on ten-frame counting mats and colors in another set of ten-frames and records the actual number. The student then asks a friend to grab a handful of Unifix cubes so she can repeat the activity with the friend’s cubes. Note: This is not a partner activity. The friend only grabs a handful of cubes so the student can repeat the activity with a different number of cubes.

**Skills & Concepts**
- Write numerals from 0–20 to represent a number of objects (K.CC.3)
- Count up to 20 objects arranged in a line, rectangular array, or circle to answer “how many?” questions (K.CC.5)
- Use a drawing to represent the ten and ones in any number from 11 to 19 (K.NBT.1)

**Materials**

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<tbody>
<tr>
<td>TM T6  Work Place Guide 7B Measuring Handfuls</td>
<td>18 Numbers to Ten Counting Mats, Ten-Frame side</td>
<td>6 containers of Unifix cubes, about 30 in each</td>
</tr>
<tr>
<td>TM T7  Work Place Instructions 7B Measuring Handfuls</td>
<td></td>
<td>6 crayons</td>
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<tr>
<td>TM T8  7B Measuring Handfuls Record Sheet</td>
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</tbody>
</table>

**Assessment & Differentiation**
Here are some quick observational assessments you can make as students begin to play this game on their own. Use the results to differentiate as needed.

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<thead>
<tr>
<th>If you see that...</th>
<th>Differentiate</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>A student resists making an estimate or changes the estimate after counting the cubes.</td>
<td>SUPPORT The student may be fearful of being “wrong.” While you can encourage him to make estimates, don’t force him. His confidence will increase over time. You can ask questions to guide him to an estimate.</td>
<td>“Do you think there are more than 10 cubes? How many more than 10?” “Do you think there are enough for one mat? Two mats?”</td>
</tr>
<tr>
<td>A student has difficulty determining the actual number of cubes.</td>
<td>SUPPORT Be sure the student sets out the cubes on the counting mats first, then colors in the mats on the record sheet. This will help her determine the number. Encourage her to count by tens and ones, but don’t force her.</td>
<td>“How many mats are full? Is that 10? 20?” “How many ones?” “How many is that in all?”</td>
</tr>
<tr>
<td>A student easily makes estimates, counts the cubes, and records all the information on the record sheet.</td>
<td>CHALLENGE Invite the student to write equations for her estimates and actual numbers, showing how many 10s and how many 1s. Invite the student to try variation A.</td>
<td>If the student estimates 21, her equation could be 21 = 10 + 10 + 1. If her actual number is 17, her equation could be 10 + 7 = 17.</td>
</tr>
</tbody>
</table>

**English-Language Learners** Use the following adaptations to support the ELL students in your classroom.
- The concept of an estimate can be difficult. Try pointing to the pile of cubes and shrugging your shoulders. With a puzzled expression, ask, “How many?” You might make some suggestions while pointing to the pile: 12? 15? 18?
Work Place Instructions 7B Measuring Handfuls

Each student needs:
• 1 Measuring Handfuls Record Sheet
• 1 container of Unifix cubes
• 3 Numbers to Ten Counting Mats
• 1 crayon

1. The student sets out the Numbers to Ten Counting Mats with the ten-frame side showing.
2. The student takes a handful of Unifix cubes—one hand only—and sets them in a pile.
3. The student estimates how many cubes are in the pile, colors in that many on the first set of mats on the Measuring Handfuls Record Sheet, and writes the number.
4. Now the student sets the cubes out on counting mats and determines how many there are. She colors in the actual number on the second set of mats on the record sheet and writes the number.
5. The student asks a friend to write his name in the box on the bottom half of the record sheet and take a handful of cubes.
6. The student estimates how many cubes are in the friend’s handful, colors that many on the third set of mats on the record sheet, and writes the number.
7. Finally, the student counts out the friend’s handful on counting mats. She colors in the mats at the bottom of the page to show the actual number, and writes the number.

Game Variation

A. The student takes two handfuls of cubes at a time, which may give her a number between 20 and 30, and continues as usual.
7B Measuring Handfuls Record Sheet

How many Unifix cubes in my handful?
My estimate ____________

The actual number ____________

7B Measuring Handfuls Record Sheet

How many Unifix cubes in my handful?
My estimate ____________

The actual number ____________
A Pound of Potatoes  page 1 of 2

How many objects are in each part of the graph? Write the numbers on this graph. Then draw a picture of the potatoes in the center, one object that is heavier than the potatoes in the Heavier Than 1 Pound section, and one object that is lighter than the potatoes in the Lighter Than 1 Pound section.

<table>
<thead>
<tr>
<th>Lighter Than 1 Pound</th>
<th>Exactly 1 Pound</th>
<th>Heavier Than 1 Pound</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Lighter Than 1 Pound" /></td>
<td><img src="image2" alt="Exactly 1 Pound" /></td>
<td><img src="image3" alt="Heavier Than 1 Pound" /></td>
</tr>
</tbody>
</table>

NAME | DATE
--- | ---

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</tr>
</tbody>
</table>
A Pound of Potatoes  page 2 of 2

Look at the two objects in each box. Circle the one that you think is heavier.
Measuring Handfuls

How many Unifix cubes in my handful?
My estimate ____________

The actual number ____________

How many Unifix cubes in ______________________________’s handful?
My estimate ____________

The actual number ____________
How Many to Make Five?

1. Count the cubes in each group. How many more would it take to make 5? Write the number.

   _______ + _______ = _______

2. Count the cubes. How many more to make 5? Write an equation on the line to show how many cubes in all.

   _______ + _______ = _______
**How Many in a Pound?**  page 1 of 3

**Note to Families**
Here’s an opportunity to give your child something productive to do at the grocery store. Find the scales in the produce section and weigh the items pictured on the record sheet.

**Materials**
- How Many in a Pound? pages 1–3
- pencil

**Instructions**

1. Take the record sheet on page 2 and a pencil to the grocery store.
2. Find the scales in the produce (vegetables and fruits) section.
3. Find the onions. There might be more than one kind or size; pick just one kind.
4. Guess how many onions it will take to weigh 1 pound. (Remember, that’s how much the sack of potatoes weighed at school.)
5. Put the onions on the scale one at a time and stop when the scale shows about 1 pound. Record the number of onions on the record sheet. Put the onions back.
6. Continue gathering and weighing the items pictured and record how many it takes of each to weigh about a pound.
7. **CHALLENGE** Help the adults you are with to weigh some of the items they need. For example, they might need 2 pounds of oranges or half a pound of broccoli.
8. At home, complete the worksheet on page 3 and return it to your teacher.

(continued on next page)
Take this record sheet to the grocery store. Find the scales in the produce section and weigh the items pictured. Record how many of each it takes to weigh about a pound.

<table>
<thead>
<tr>
<th>How Many in a Pound?</th>
<th>page 2 of 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Take this record sheet to the grocery store. Find the scales in the produce section and weigh the items pictured. Record how many of each it takes to weigh about a pound.</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>about a pound of onions:</th>
<th>how many onions?</th>
</tr>
</thead>
<tbody>
<tr>
<td>about a pound of potatoes:</td>
<td>how many potatoes?</td>
</tr>
<tr>
<td>about a pound of carrots:</td>
<td>how many carrots?</td>
</tr>
<tr>
<td>about a pound of bananas:</td>
<td>how many bananas?</td>
</tr>
<tr>
<td>about a pound of apples:</td>
<td>how many apples?</td>
</tr>
<tr>
<td>about a pound of lemons:</td>
<td>how many lemons?</td>
</tr>
</tbody>
</table>

(continued on next page)
Make a circle around the objects that would be *heavier* than a potato. Make a box around the ones that would be *lighter* than a potato.

How many of the objects are *heavier* than a potato? ____

How many of the objects are *lighter* than a potato? ____
Fill It to Five  page 1 of 3

Note to Families

Your child has played this game in school. Students practice adding numbers to 5 and writing equations.

Materials

- Fill It to Five, pages 1–3
- pencil and paperclip (for the spinner)

Instructions

1. Spin the spinner and add the number to 5.
   
   Child  I spun 4.
   
   Adult  How much is 5 and 4 more?
   
   Child  I know it’s 5… 6, 7, 8, 9.

2. Starting with the bottom box in the appropriate column, write an equation to represent the sum.
   
   Adult  Where should you write the equation?
   
   Child  Here. (Points to the bottom box of the column labeled “5 + 4.”)
   
   I’m going to write 5 + 4 = 9.

3. Keep spinning and writing equations until one column is filled.

4. Once the game is complete, think about these questions:
   
   - Which equation did I write the most? How many times?
   - Which equation did I write the least? How many times?”

5. CHALLENGE  Once your child has determined the sum, ask:
   
   - “How many more to make 10?” or “How many more to make 20?”
   - “What is ___ minus ___?” (For example, if the child spins 4, she writes the equation 5 + 4 = 9. Then ask, “What is 9 minus 4?” and “What is 9 minus 5?”)

6. Complete the worksheet on page 3 and return it to your teacher.

(continued on next page)
Fill It to Five  page 2 of 3

5 + 0  5 + 1  5 + 2  5 + 3  5 + 4  5 + 5

(continued on next page)
Fill It to Five  page 3 of 3

Add (+) or subtract (–). Use counters, ten-frames, or draw pictures if you wish.

1  Solve each addition problem.

\[
\begin{array}{cccccc}
4 & 5 & 0 & 3 & 1 & 2 \\
+1 & +0 & +5 & +2 & +4 & +3 \\
\end{array}
\]

2  Solve each subtraction equation.

\[
\begin{array}{c}
5 - 0 = \underline{\hspace{2cm}} \\
5 - 4 = \underline{\hspace{2cm}} \\
5 - 2 = \underline{\hspace{2cm}} \\
5 - 3 = \underline{\hspace{2cm}} \\
5 - 5 = \underline{\hspace{2cm}} \\
5 - 1 = \underline{\hspace{2cm}} \\
\end{array}
\]

3  **CHALLENGE**  Add (+) or subtract (–).

\[
\begin{array}{c}
5 + 5 = \underline{\hspace{2cm}} \\
\underline{\hspace{2cm}} = 5 + 3 \\
10 - 4 = \underline{\hspace{2cm}} \\
\underline{\hspace{2cm}} = 10 - 2 \\
\end{array}
\]