

## Notable Unit Planner Changes

\*The collection of five Travel Games and the inclusion of *Number Line Race* as the sixth Work Place, provide continuing practice in computation and place value. These six games become the Work Places for Unit 4 rather than take-home activities, allowing this established classroom routine to continue. As students finish in each session, they may go to Work Places as time permits. A new Work Place planner has been provided on page A10.15.

<b>Session 1 (Day 1, pp 423-425):</b>	<b>Blacklines</b>
The video on day 1, Behind the News: Antarctica is from Discovery Education. If you don't have a subscription to Discovery Streaming, consider substituting an alternate video that sets the stage for journeying to Antarctica.	• BL 4.1, class set
<b>Session 2 (Day 1, 425-428):</b>	<b>Blacklines</b>
<p>During Session 2 of Penguins, students will make penguin folders similar to the one shown on page 425 to keep their work in through the unit. You'll want to have paper cut to the following sizes for these folders. The quantities listed below are enough for one student to make a folder, so just multiply every – thing by the number of children in your class plus a few extra.</p> <ul style="list-style-type: none"> <li>• 12" • 18" piece of blue construction paper folded in half for a folder cover</li> <li>• 3" • 9" piece of white construction paper (snow)</li> <li>• 4" • 6" piece of black construction paper (penguin body)</li> <li>• 3" • 3" piece of white construction paper (penguin tummy)</li> <li>• 3" • 3" piece of orange and/or yellow construction paper (penguin beak and feet)</li> <li>• 2 plastic wobble eyes (optional)</li> </ul> <p><b>Measure and weigh students for their passports today; have them make their own Measuring Strips tomorrow.</b></p>	•BL 4.4, class set
<b>Session 3 (Day 1, 426; Day 3, 444):</b>	<b>Blacklines</b>
<p>Copy <i>Ten Little Penguins</i> and make into class book.</p> <p>Most of session 3 involves the students making the measuring strips they will use throughout the unit. Copy Blacklines 4.2-4.3 on card stock. Have scissors and glue (or tape) ready. It is helpful to have the students put their initials on the back of each section to minimize confusion as the measuring strips are assembled and later should the measuring strips come apart. As students finish their measuring strips have them practice measuring things around the room. For example, have the students fold a sheet of paper in thirds and label the sections <i>longer</i>, <i>shorter</i>, and <i>the same</i>. Students can measure items in the room and compare them to the length of their measuring strip and record the items on this sheet of paper.</p>	<ul style="list-style-type: none"> <li>• BL 4.2–4.3 class set</li> <li>• BL 4.15–4.25, 1 copy</li> </ul>
<b>Session 4 (Day 2, 433-436):</b>	<b>Blacklines</b>
<p><b>*Journey to Antarctica, see p. 433</b> (Make 3 game boards.)</p> <p>You will teach this game to the students whole group and then introduce it as a new Work Place. Use OH 4.1 or one of the game boards you've prepared to teach this game to the class. Ignore the instructions to have children make their own copies of the game and prepare Travel Game envelopes. In this game students move around a game board spending money on items to prepare for their trip to Antarctica. Each person has \$100. They color the amount of the item on a 100's grid. The person with the most money "left over" wins the game.</p> <p><b>Note</b> A challenge version uses \$200 and money amounts that are not landmark numbers. See Blacklines on p. A10.16–A10.18 in this Supplement Set.</p>	<ul style="list-style-type: none"> <li>•BL 4.5, class set</li> <li>•BL 4.6-4.7, 3 sets on card stock</li> <li>•BL A10.16-A10.18 (for challenge only)</li> </ul>
<b>Session 5 (Day 3, 440-443):</b>	<b>Blacklines</b>
<p><b>Where are the Polar Bears? P.439</b>  <b>Exploring Water Temperatures, pp. 441-443</b></p> <p>Thermometers and Ocean Temperature Cards</p> <ul style="list-style-type: none"> <li>• Blackline 4.9, Teacher Thermometer (optional)</li> <li>• Blackline 4.10, Student Thermometers (optional)</li> </ul>	<ul style="list-style-type: none"> <li>•BL 4.11-4.13, 1 copy each on cardstock</li> <li>•BL 4.14, class set</li> <li>•BL Practice Book,</li> </ul>

<ul style="list-style-type: none"> <li>• Blacklines 4.11–4.13, Ocean Temperatures Cards</li> </ul> <p>If you've been doing the temperature lessons from Number Corner this year, you won't need to make a large teaching thermometer and small cardstock student thermometers. If you haven't, you might want to use Blacklines 4.9–4.10 to make these in order to familiarize your students with reading thermometers. In either case, you'll need to run single copies of the Ocean Temperature Cards on cardstock, cut them apart, and laminate them for the water temperature experiments on Session 5.</p>	<p>pg. 39, class set</p>
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<p><b>Session 6 (Day 4, 447-453):</b></p>	<p><b>Blacklines</b></p>
<p><b>Measuring Weight and Height: Rockhopper Penguin</b></p> <p><b>Revised Weight Activity</b> This replaces the weight part of "Measuring Height &amp; Weight" found on pp. 450, 484, and 500.</p> <ul style="list-style-type: none"> <li>• A10.11–A10.14 (Found in CCSS blacklines) Run one copy each. Cut on solid line and attach to paper bag.</li> </ul> <p>Make this activity a bit easier unless you have an assistant or good parent volunteers. As you study each of the lighter weight penguins, glue a picture of each one on a grocery bag filled with food cans or other items to match the weight of each. Ideally, you'll have several bags available after studying 3 or 4 penguins so kids can compare weights by lifting. Share this task and the bags with team members and it won't feel so hard. Don't be surprised if many of your children mix up the idea of weight and height.</p> <p><b>Measuring Height Activity Materials Preparation</b> See page 450 in the teacher's guide. You will need to wrap a half class set of popsicle sticks or tongue depressors with 8 yards of string each.</p>	<ul style="list-style-type: none"> <li>• Song &amp; Poetry Portfolio, pp 4.4–4.5, 1 copy each</li> <li>• BL's 4.26-4.30, class set of each</li> <li>• A10.11–A10.14 Run one copy each</li> </ul>

<p><b>Session 7 (Day 4, 454-455):</b></p>	<p><b>Blacklines</b></p>
<p><b>*Penguins on Board Addition, see p. 454</b> (Make 3 game sets.) You will teach this game to the students whole group and then introduce it as a new Work Place. This game provides practice with adding doubles and neighbors facts. Using coordinate cards, students select a door to open and answer a math fact. Students get the amount of money on the door. At the end of the game, students count their money.</p>	<ul style="list-style-type: none"> <li>• BL 4.31 &amp; 4.33, 3 copies each on cardstock</li> <li>• BL 4.32, 3 copies on cardstock</li> <li>• BL 4.34–4.35, 3 copies each</li> </ul>

<p><b>Session 8 (Day 5, 459-462):</b></p>	<p><b>Blacklines</b></p>
<p><b>King Penguins</b></p>	<ul style="list-style-type: none"> <li>• Song &amp; Poetry Portfolio, pp 4.6–4.7, 1 copy each</li> <li>• BL 4.37, class set</li> <li>• BL 4.38, class set</li> </ul>

<p><b>Session 9 (Day 6, 470-471):</b></p>	<p><b>Blacklines</b></p>
<p><b>Graphic Organizer Chart</b> (Needed for Session 6 and Beyond) See page 413 for visual.</p> <ul style="list-style-type: none"> <li>• Blacklines 4.39–4.44, Graphic Organizer Labels 1–6 (these are available online at <a href="http://www.mathlearningcenter.org/preview/b1/b1tg-b">www.mathlearningcenter.org/preview/b1/b1tg-b</a>)</li> </ul> <p>Pull a large piece of butcher paper and create columns and rows as shown on page 413, either by folding the paper or using a yardstick and marking pen. Use the labels provided in the blacklines to create the headings on the chart or print them in yourself. Importing color photos and attaching them to the chart will provide children with a visual model. Also, add a color, visual model of what each beak and set of feet look like. This will help students when they are filling out their penguin data sheets.</p>	<ul style="list-style-type: none"> <li>• BL 4.39–4.44, optional, 1 copy each label graphic organizer</li> <li>• BL's 4.45 &amp; 4.46, class set, single sided</li> <li>• BL 4.27, class set</li> </ul>

<b>Session 10:</b>	<b>Blacklines</b>
<b>Work Places</b>	<ul style="list-style-type: none"> <li>• Practice Book, pp. 37 &amp; 38, class set</li> </ul>
<b>Session 11 (Day 6, 469, 472-473):</b>	<b>Blacklines</b>
<p><b>Help! A Skua!</b> see p. 472 (Make 8 sets.)  You will teach this game to the students whole group and then introduce it as a new Work Place. Use one set of cards you've prepared to teach this game to the class. Ignore the instructions to have children make their own copies of the game and prepare Travel Game envelopes.</p> <p>In this game the students read and match 2-digit numbers to their 10's and 1's pictorial equivalent, as done in previous Number Corner sessions. The game is played like Old Maid where the person without the Skua card at the end of the game is the winner. The Skua is a penguin predator.</p> <p><b>Note:</b>  <b>Help! A Skua! and Old Orca Card Games</b>  In sessions 11 and 17, card games are introduced. If students have limited experiences with playing card games, the teacher may want to have the class play in small groups of 3-4 students before adding the game to Work Places (8 sets of cards are suggested for this purpose). Additionally, the students can be shown how these same cards can be used to play a memory or matching game. This alternative allows the students to either play by themselves or with a partner. Be sure to put at least 6 sets out for Work Places.</p>	<ul style="list-style-type: none"> <li>• BL 4.47-4.50, 8 copies each on cardstock</li> </ul>
<b>Session 12 (Day 7, 477-480, 484-486):</b>	<b>Blacklines</b>
<p><b>Little Blue Penguin</b></p> <ul style="list-style-type: none"> <li>• The Height and Weight of Little Blue Penguins, pp. 484-486 (Just the Little Blue Data Sheet, not the height comparison or weight sheets)</li> </ul>	<ul style="list-style-type: none"> <li>• Song &amp; Poetry Portfolio, pp 4.10-4.11, 1 copy of each sheet</li> <li>• BL 4.51, class set</li> <li>• BL 4.56, class set</li> </ul>
<b>Session 13 (Day 7, 481-483):</b>	<b>Blacklines</b>
<p><b>Spin to Win Bingo</b>, see p. 481 (Make 3 game boards and 3 sets of cards.)  You will teach this game to the students whole group and then introduce it as a new Work Place. Use one of the game boards you've prepared to teach this game to the class. The cards will go in the pocket chart and the game board will go on the document camera. Ignore the instructions to have children make their own copies of the game and prepare Travel Game envelopes.</p> <p>This partner game provides practice with +9 and +10 facts. The cards are not actually part of the game, but can be used by the students for review or laid out to provide a visual model for solving the problem. Students spin the attached spinners to generate an equation and place a marker on their board's answer. The first person with 4 in a row (horizontally, vertically, or diagonally) wins.</p>	<ul style="list-style-type: none"> <li>• 4.52-4.54, 3 sets on cardstock</li> <li>• 4.55, 3 copies on cardstock</li> </ul>
<b>Session 14 (Day 8, 491-492):</b>	<b>Blacklines</b>
<p><b>Another Look at the Addition Facts in Spin to Win Bingo</b>, pp. 491-492  You'll need the set of Spin to Win cards from Day 7.</p>	
<b>Session 15 (Day 8, 489-493):</b>	<b>Blacklines</b>
<p><b>The Height &amp; Weight of the Gentoo Penguin</b>, p. 493</p> <ul style="list-style-type: none"> <li>• Just the Gentoo Penguin Data Sheet, not the Weight Sheet</li> </ul>	<ul style="list-style-type: none"> <li>• Song &amp; Poetry Portfolio, pp 4.8-4.9, 1 copy each</li> <li>• BL 4.57, class set</li> <li>• BL 4.58, class set</li> <li>• Practice Book, p. 41, class set</li> </ul>
<b>Session 16 (Day 8, 494):</b>	<b>Blacklines</b>
<b>Complete How Tall is Each Penguin? for Little Blue and Gentoo Penguins</b> , p. 485	<ul style="list-style-type: none"> <li>• BL 4.59 &amp; 4.60,</li> </ul>

<ul style="list-style-type: none"> <li>•Students will need their How Tall is Each Penguin Sheets from Session 9. These sheets should be in their Penguin folders.</li> </ul>	class set
<b>Session 17 (Day 9, 499-500):</b> <b>Old Orca Subtraction, see p. 499</b> (Make 8 sets.) This game is played like <i>Help! A Skua!</i> The students match subtraction facts with their differences. The card to avoid is the orca whale, another penguin predator. You will teach this game to the students whole group and then introduce it as a new Work Place. Use one of the card sets you've prepared and the pocket chart to teach this game to the class.	<b>Blacklines</b> <ul style="list-style-type: none"> <li>• BL 4.62–4.64, 8 copies each on cardstock</li> </ul>
<b>Session 18 (Day 9, 497-498, 500-501):</b> <b>The Height and Weight of the Chinstrap Penguin, pp. 500–501</b> Just the Chinstrap Penguin Data Sheet, not the Weight or the How Tall is Each Penguin Sheets.	<b>Blacklines</b> <ul style="list-style-type: none"> <li>• Song &amp; Poetry Portfolio, pp 4.12–4.13, 1 copy each</li> <li>• BL 4.61, class set</li> <li>• BL 4.65, class set</li> </ul>
<b>Session 19 (Supplement Set):</b> <b>Number Line Race, see p. A10.19</b> (Make 3 game boards.) This game has been added to the unit to provide a total of six Work Places. This game provides additional practice using a number line for addition and subtraction. Students start with their markers in the middle of the number line. They take turns spinning the spinner and moving their markers. The first person to land on the last number on the line, wins. Students may choose between a 0–10 and a 0–20 number line.  Complete directions and instructions for making the first five games are found in the Bridges Teacher's Manual. Number Line Race Directions are included in the Supplement Set A10, Activity 1.  You will teach this game to the students whole group and then introduce it as a new Work Place. Use one of the game boards you've prepared to teach this game to the class.	<b>Blacklines</b> <ul style="list-style-type: none"> <li>• A10.22, 3 copies on cardstock</li> <li>• A10.23, 3 copies on cardstock (optional)</li> </ul>
<b>Session 20 (Day 10, 505-511):</b> <b>Measuring the Height of the Emperor Penguins, pp. 510–511</b> Just the Emperor Penguin Data Sheet, not the Weight or the How Tall is Each Penguin Sheets.	<b>Blacklines</b> <ul style="list-style-type: none"> <li>• Song &amp; Poetry Portfolio, pp 4.14–4.15, 1 copy</li> <li>• BL 4.66, class set</li> <li>• BL 4.67–4.68, 1 copy each, label graph as on p. 510.</li> <li>• BL's 4.73 &amp; 4.69, class set</li> <li>• Practice Book, p. 40, class set</li> </ul>
<b>Session 21 (Day 10, 512-513):</b> <b>Complete How Tall is Each Penguin? Sheet for Chinstrap &amp; Emperor Penguins, p. 485</b> Students will need their How Tall is Each Penguin Sheets from Session 9. These sheets should be in their Penguin folders.	<b>Blacklines</b> <ul style="list-style-type: none"> <li>• BL 4.70–4.71, class set of each sheet</li> </ul>
<b>Session 22 (Day 11, 519-521):</b> <b>A Graph</b> See page p. 519 <ul style="list-style-type: none"> <li>• Which Life-size Penguin Will You Make?</li> </ul> Pull a large piece of butcher paper and create columns and rows as shown on page 520, either by folding the paper or using a yardstick and marking pen. Use file cards or cut construction paper for graph markers. You'll need to pull approximate lengths of paper before tomorrow.	<b>Blacklines</b>

<p><b>Session 23 (Day 11, 522; Day 12, 528-531):</b></p> <p><b>Penguin Pairs: A Growing Pattern</b> See p. 522</p> <p>Have children make a penguin pair.</p> <ul style="list-style-type: none"> <li>• 4 1/2" x 6" pieces of black construction paper (2 for each child)</li> <li>• 3" x 4 1/2" pieces of gray construction paper (for little blue penguins)</li> <li>• 3" x 4 1/2" pieces of white construction paper (2 for each child)</li> <li>• 3" x 3" squares of yellow, orange, pink, and black (for beaks, feet, rockhopper feathers)</li> </ul> <p>Note: Save the completed penguins for sessions 24, 25</p> <p><b>Measuring &amp; Drawing the Life-Size Penguins</b> See p. 529</p> <ul style="list-style-type: none"> <li>• a piece of butcher paper for each child, cut to approximate length of the penguin he/she wants to make.</li> <li>• a piece of butcher paper about 39" long for your demonstration</li> </ul>	<p><b>Blacklines</b></p>
<p><b>Session 24 (Day 12, 525-528; Day 13, 535-538):</b></p> <p><b>A Growing Pattern of Penguin Pairs</b> See p. 525</p> <ul style="list-style-type: none"> <li>• 3" x 9" white construction paper (1 per child &amp; a few extras)</li> <li>• two 36" x 60" pieces of blue butcher paper glued together to hold the finished Penguin Pair arrangement (See p. 528.)</li> </ul> <p>Note: Children complete BL 4.76 after discussing the chart.</p>	<p><b>Blacklines</b></p> <ul style="list-style-type: none"> <li>• BL 4.74-4.75, 1 copy of each for your Penguin Pairs chart</li> <li>• BL 4.76, class set</li> </ul>
<p><b>Session 25 (Day 13, 538-539):</b></p> <p><b>Painting Life-Size Penguins,</b> See p. 538-539</p> <p>As children finish, they go to Work Places. Or, you could have small groups of students rotate to the "painting station" as the other students are working at Work Place centers.</p>	<p><b>Blacklines</b></p> <ul style="list-style-type: none"> <li>• Practice Book, pp. 42 &amp; 46, class set of each sheet</li> </ul>
<p><b>Session 26 (Day 14, 549-551):</b></p> <p><b>Measuring Up- A Worksheet</b></p> <p>Have children finish painting their life-size penguins.</p>	<p><b>Blacklines</b></p> <ul style="list-style-type: none"> <li>• BL's 4.78-4.79, class set</li> </ul>
<p><b>Session 27 (Day 15, 555-559; Day 14, 543-546):</b></p> <p><b>Picture Problems and Penguin Sorting</b> See p. 555</p> <ul style="list-style-type: none"> <li>• 6-8 3" x 12" pieces of construction paper to write quick sorting labels</li> </ul>	<p><b>Blacklines</b></p>
<p><b>Session 28 (Day 15, 559-561):</b></p> <p><b>Making the Penguin Problem Backgrounds</b> See p. 560</p> <ul style="list-style-type: none"> <li>• one 9" x 12" piece of dark blue or aqua construction paper</li> <li>• one 4 1/2" x 12" piece of white construction paper</li> <li>• one 4 1/2" x 12" piece of light blue construction paper</li> </ul>	<p><b>Blacklines</b></p>
<p><b>Session 29 (Day 16, 565-570):</b></p> <p><b>Making the Penguin Problem Backgrounds</b> See p. 568</p> <ul style="list-style-type: none"> <li>• 3" x 12" white construction paper ("ice flaps"-enough for about 2/3 of your students)</li> <li>• 3" x 12" light blue construction paper ("water"-enough for about 1/2 your students)</li> </ul> <p>Note: At the end of the school day choose a few problems that will be accessible to the majority of your students to put on a wall display for session 30.</p>	<p><b>Blacklines</b></p>
<p><b>Session 30 (Day 17, 573-575):</b></p> <p><b>Solving Student Penguin Problems</b></p>	<p><b>Blacklines</b></p> <ul style="list-style-type: none"> <li>• Practice Book, pp. 44 &amp; 45, class set</li> </ul>