Daily Routines & Daily Challenges N December **Days in School** How Many Altogether? ر بر **بر** 5 + 5 + 5 = 15 10 +5 = 15 The Days In School **Movember** 🆓 May en? Days this Month 0 Year 0 11 N. B _____ ((°` Ø October **April** Z Month σ N 8 Saturday 4 **September** Aarch 2 Friday ð 9 Thursday 0 C September Wednesday 🌴 February hο 5 🖞 August N7 Tuesday <u>m</u> Monday 🕭 January ×July <u>ل</u> Sunday

Tuesday Challenge I





Making Student Clocks

Overview

In this lesson, students examine the classroom clock and share observations. Then I2 of the children form a circle and use a set of large numeral cards to create a human clock in the group meeting area as the other youngsters watch. After a second round with the cards so that everyone gets a turn to be part of the clock, children trace the numerals on their own student clocks. Later, you'll attach colored poster board hands to these clocks and save them for future use.

Skills

- ★ exploring the numbers and their position on the clock
- ★ writing numerals I–I2

You'll need

- ★ Student Clock (Blackline NC 2, run a class set of clocks on cardstock or construction paper, plus a few extras for yourself and any late entering students)
- ★ Number Cards, I–I2 (Blacklines NC 3–4, run I copy of each sheet on cardstock and cut apart.)
- ★ a ladybug from your Bucket of Bugs (If you don't have a Bucket of Bugs, run a copy of Blackline NC 5 on red paper and trim)
- ★ pencils
- ★ poster board in 2 different colors to make clock hands
- ★ a nail or school compass and some brass fasteners

After you finish the Daily Routines, direct children's attention to the classroom clock and explain that you're going to work on time-telling today. What number is at the top of the clock? What number is at the bottom? What else do they notice about the clock? Then explain that you're going to have them help make a human clock in the center of the discussion area. Hand out the number cards and set out a ladybug on the floor. Tell students that the ladybug represents the top of the clock and you'd like the children holding numbers to arrange themselves in a circle just like the numbers on the clock. Have them hold their number cards up so everyone can see. You'll probably have to guide your students the first time around. We find that it helps to place the children who are holding the 12, 3, 6, and 9 cards. With these four acting as anchor points in the circle, the other can step into place more easily. Once the children are in place, have the students who are watching compare this human arrangement to the classroom clock. Did their classmates get every number in the proper place? Hand out the cards a second time and ask the new group to see if they can create the clock formation more quickly than the first group, now that everyone understands what to do.

Tuesday Challenge I (cont.)



Finally, show your students the cardstock clocks you've run for each of them. Distribute the clocks and ask youngsters to write their names at the top and trace the numbers very carefully.

Before next Tuesday you may want to laminate the children's clocks, and, you'll also need to add cardstock or poster board hands. We suggest that you do these in two colors so that you can describe them as the (blue) long hand and the (yellow) short hand as you challenge children to set the time in future lessons. Cut $1/2" \times 4"$ poster board strips (for the minute hands) and $1/2" \times 3^{1}/2"$ strips (for the hour hands) on the paper cutter and then use scissors to cut the points. Use a sharp nail or school compass to punch a hole near the base of each hand as well as in the center of each clock in order to attach both hands with a brass fastener. These clocks will be used the entire year.



Tuesday Challenge 2



Telling Time to the Hour on the Student Clocks

Overview

Today the children explore telling time to the hour with their student clocks and learn a new song.

Skills

★ Telling time to the hour

You'll need

- ★ clocks your students made last Tuesday, with poster board hands attached
- ★ Paper Clocks song from "Learning Basic Skills Through Music," Volume 2, audiotape by Hap Palmer
- ★ tape recorder

After the Daily Routines are finished, give children the clocks they made last week. Have students take a look at the classroom clock and note that it has two hands. What do they notice about the hands? What about the hands on their own clocks? Have students move the (blue) long hand to the 12 and hold it there. Then ask them to turn the (yellow) short hand so it points to the 1.



Does anyone know what time the clocks say now? Ask them to move the long hand all the way around the clock, stopping again at 12, and point the short hand to the 2. Explain that every time the minute hand (long hand) goes all the way around the clock, another hour passes and the hour hand moves one number. What time is it now?

Tuesday Challenge 2 (cont.)



Continue to have children move the hands on their clocks in this fashion all the way through the 12 hours. Then play "Paper Clocks." Sing the song along with the tape as students move the hands on their clocks. The children will enjoy singing this song often. When the activity is finished, be sure to collect the student clocks in a basket where you can safely store them for future lessons.

Daily Routines & Daily Challenges $\bullet \bullet \bullet$ 92 Mecember 1 **@June** (5+5)+(5+5)+(5+5)+2=32 6 **Days in School** How Many Altogether? 10 + 10 + 10 + 2 = 32 30 + 2 = 32 The Days In School **Movember** 🆗 May Days this Month Year 0 0 Day 5 @October **April** Month \mathcal{O} Saturday E P **September** 🐏 March **1** 790 Friday Wednesday Thursday A October 🏷 February 🖨 August Tuesday Monday 🐔 January √Jul **3 1 1 1 1 1** N NE Sunday

Tuesday Challenge I



Time to the Hour on the Student Clocks

Overview

In today's session children review telling time to the hour and begin collecting temperature data for October.

Skills

- ★ exploring the numbers and their positions on a clock face
- ★ telling time to the hour
- ★ measuring the outdoor temperature
- ★ comparing temperatures: warmer or cooler
- ★ predicting future temperatures



You'll need

- ★ Number cards, I–I2 (Use the cards you made for September's Time, Tally & Temperature Challenge I, or see Blacklines NC 3–4 to make a new set.)
- ★ a ladybug from the bucket of bugs or a paper ladybug (Blackline NC 5)
- ★ student clocks
- ★ Hap Palmer tape set to play "Paper Clocks"
- \star outdoor thermometer
- ★ Tuesday's Temperature chart (Blackline NC 6, run a new copy)
- ★ a ½" × 12" strip of red construction paper
- ★ temperature chart your class kept in September

In the first time challenge this month children re-create the human clock they made last month (see below). Hand out the number cards, one per student, and ask students holding the cards to arrange themselves in a circle with the top of the clock by the ladybug on the rug. Ask students to use the classroom clock to check their arrangement. Are the numbers sequenced correctly around the circle? Is the 6 across the circle from the 12? Is the 3 across from the 9? If the remaining children are eager to have a turn, hand out the cards again and repeat the activity.



Tuesday Challenge I (cont.)

Distribute students' clocks and have children set them to various times on the hour. Where do they need to point the long (minute) hand each time? Demonstrate how the minute hand would need to go all the way around the clock for the hour hand to move to the next number. If your wall clock has a second hand, have the children watch for 60 seconds. They'll be quite amazed to find that they would have to watch the second hand go around 60 times for an hour to pass. Finally, play "Paper Clocks" and encourage children to sing along as they set their clocks to the hour.

TUESDAY'S TIME, TALLY & TEMPERATURE

After recess today, gather children around the outdoor thermometer. Give all of them a chance to look at the height of the mercury and show them how you're reading the numbers. Have one of the children cut a red strip to match the height of the mercury and glue it to a new Tuesday's Temperatures chart. Compare it to the September chart. Is the temperature about the same or is it warmer or cooler than it was on the last Tuesday in September?



"It's about the same."

Tuesday Challenge 2



TUESDAY'S TIME, TALLY & TEMPERATURE

Clocks & Time Cards A Matching Game

Overview

In this lesson, the teacher introduces a set of I2 clock cards that show time to the hour. After children have examined a few cards and determined the times, the teacher introduces a set of matching time cards. Children then play a game to match the 2 sets of cards, and finally display the pairs on the pocket chart. Students also take a temperature reading after morning recess.



You'll need

- \star Clock cards
- ★ Time cards
- ★ pocket chart
- ★ your key ring
- ★ outdoor thermometer
- ★ October temperature chart and a red construction paper strip

Skills

- ★ telling time to the hour
- ★ matching clock faces to time cards
- \star measuring the temperature
- ★ comparing temperature: warmer or cooler
- ★ predicting future temperatures

Begin the session by showing children the clock cards. What time is it on each clock? Show them a couple of the time cards. Can they read what these cards say?



Once they're familiar with the clock cards and time cards, hand out both sets to students and jingle your keys while they each find their match. Once they've located their partners, have students bring the cards, a pair at a time, to the pocket chart.

Tuesday Challenge 2 (cont.)



Is everything correct? Mix up the clocks and ask students who didn't get a turn earlier to match the pairs one more time in the pocket chart.



It's Tuesday again, so gather the children outside after morning recess to read the thermometer and record the data on the temperature chart. Is this Tuesday warmer or cooler than last Tuesday?

DATE _____

Student Clock



Number Cards, I–6

Run 1 copy on cardstock. Cut cards apart and laminate.



Number Cards, 7–12

Run 1 copy on cardstock. Cut cards apart and laminate.











Make I copy on cardstock. Cut apart on thin lines. Laminate.



Make I copy on cardstock. Cut apart on thin lines. Laminate.

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Wednesday Challenge I

WEDNESDAY'S WORKOUT

Ten & More

Overview

Today, children examine 5 or 6 different cards in which bugs have been organized into double ten-frames. As each card is displayed, children determine how many bugs there are and share their counting strategies with classmates. After all the bug cards have been set out in the pocket chart, the teacher shows a number sentence that matches one of the bug cards and challenges children to figure out which one it is. This continues until each bug card has been labeled with a number sentence.

Skills

- ★ exploring quantities from 10 to 20
- ★ exploring standard notation for addition

You'll need

- ★ Ten & More cards (choose 5 or 6 of the cards for today's lesson)
- ★ Ten & More number sentences (be sure to select the 5 or 6 cards that match the Bug cards you've chosen)
- ★ pocket chart

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Note If children have had *Bridges in Mathematics* in kindergarten, you might want to use all the cards in both sets. They'll be quite familiar with the double ten-frames and this lesson will go more quickly. If they haven't worked with ten-frames before, you might display the bottom portion of each card only, and focus on asking children to find ways to determine how many bugs they can see in these single frames.

After you complete the daily routines, display one of the Ten $\ensuremath{\mathcal{E}}$ More cards in your pocket chart.

Teacher Today we're going to look at some cards that show more than 10 bugs and figure out some quick ways to find out how many bugs are pictured altogether. When I show you the first card, I'd like you to study it quietly and carefully. When everyone has had a chance to figure out how many bugs are pictured, you can share some of your counting strategies.

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Children It's 15. It's 10 and 5, that's easy.

Wednesday Challenge I (cont.)

Teacher But how did you know it so fast?

Sammy I just know that 10 + 5 is 15 and it's easy to see it.

Savannah I can see 5's so I went 5, 10, 15.

Leslie I saw the 10 and then I said 11, 12, 13, 14, 15.

Max I counted the whole thing 'cause I get too mixed up the other ways.

Kenny I thought it was 30 'cause I went 10, 20, 30, but then when I heard Sammy, I knew it was just 5's, so I counted the whole thing like Max.

Share the rest of the cards at the pocket chart, asking children to figure out how many bugs are on each card. Encourage students to share their counting methods in depth the first few times, but move through the remaining cards a little more quickly.

Next, display one of the Number Sentence cards and read it together. Can students find the matching bug card?

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Children That's easy. It's this one. It has 10 bugs on the top and 4 on the bottom. It's 10 + 4. The one with 14 bugs.

Once you've matched the displayed bug cards with the appropriate number sentences, explain that you'll be playing a partner game with these cards next Wednesday and you expect they'll be pretty good at it based on how well they did today.

Wednesday Challenge 2

wednesday's workout

Ten & More A Match Game

Overview

This lesson features a game in which the teacher distributes all the bug and number sentence cards to students. At her signal, the children who are holding cards get up and search among their classmates for the card that matches theirs. When all the students have paired up, they return to the Number Corner and display their matching cards in the pocket chart.

Skills

- ★ exploring numbers from 10 to 20
- ★ examining standard notation for addition

You'll need

- ★ Ten & More cards
- ★ Ten & More number sentences
- ★ pocket chart
- ★ sustained auditory signal of some sort (Some people like to jingle the keys on their key chain. Others ring a small bell or play a brief melody on the piano.)



Begin the mini-lesson by displaying one of the bug cards in your pocket chart. How many bugs do the children see? Explore several ways of determining the total but then draw their attention again to the idea of 10 and some more. Show them two of the number sentence cards. Which number sentence matches the bug card?

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+) 8]8) 3 3	+		0 9 9

Children It's the I0 + 9 card, I0 on the top and 9 on the bottom.

Explain that you're going to pass out all of the bug and number sentence cards. Students will need to keep their cards hidden from one another until they hear you jingle your keys (or give some other signal). When the keys begin to jingle, everyone holding a card will get up and look for his or her partner.

Wednesday Challenge 2 (cont.)

You'll be watching carefully and you'll stop jingling the keys as soon as you see that every card has a proper match.

Hand out the cards and then jingle your keys. Guide students' efforts as needed. (If you have a group that needs lots of direction, you might have to stop the activity once or twice and set your standards for behavior.) Stop jingling your keys as soon as all of the cards are matched.



Ask children to return to the group meeting area and be seated with their partners. Call on children, two at a time, to place their matching cards into the pocket chart. Do all the pairs match? Explain that next Wednesday, students will practice writing number sentences that match the cards.

Wednesday Challenge 3

WEDNESDAY'S WORKOUT

Writing Numerals & Number Sentences

Overview

Today's lesson will focus on writing number sentences to match the Ten & More cards.



You'll need

- ★ Ten & More cards (Select 4 or 5, you won't need the entire set today.)
- ★ pocket chart
- individual chalkboards, chalk, and erasers or white boards and pens for each child

Skills

- ★ writing numerals from I–I0
- ★ using standard notation for addition

Begin the lesson by asking children to practice writing their numerals from 1 to 10. Model the correct way to form each numeral and ask students to practice a few times on their boards.

Explain that the class is going to practice writing number sentences for a few of the bug cards today. Ask children to share some of the ways they've counted the bugs on these cards before, and then guide them in writing number sentences. Although the bugs are grouped in 10's, some of your students will notice the rows of 5, the groups of 2, and other configurations. We encourage you to help them record what they see rather than focusing exclusively on combinations of 10. It's possible that some of your students will want to write more than one number sentence about a particular card.





After a few minutes explain that next Wednesday they'll have a chance to demonstrate their number sentence writing skills on a Ten & More worksheet.

Wednesday Challenge 4





Ten & More How Many Bugs?

Overview

After a bit of whole-group review, children work independently to write number sentences for 6 different bug cards.

You'll need

- ★ Ten & More cards
- ★ pocket chart
- ★ Student Book, page 3
- \star pencils
- Skills ★ exploring numbers from 10 to 20
- ★ writing addition sentences



Display a couple of the Ten & More cards at the pocket chart. Ask children to determine how many bugs there are on each card and then ask student volunteers to demonstrate how to write horizontal number sentences for a card or two. Show children the worksheet and challenge them to study each set of

Wednesday Challenge 4 (cont.)

bugs to figure out how to write a number sentence that matches the arrangement. If your first graders don't have individual student books, you may want to collect these papers and save them in children's work folders.



If the month has five Wednesdays, you might use the Wednesday Workout time to practice numeral writing on chalkboards again.







Make I copy on cardstock. Color. Cut apart on thin lines. Laminate.



Make I copy on cardstock. Color. Cut apart on thin lines. Laminate.



Ten & More How Many Bugs?



Write a number sentence for each set of bug cards.





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Daily Routines & Daily Challenges $\bullet \bullet \bullet$ 92 Mecember 1 **@June** (5+5)+(5+5)+(5+5)+2=32 6 **Days in School** How Many Altogether? 10 + 10 + 10 + 2 = 32 30 + 2 = 32 The Days In School **Movember** 🆗 May Days this Month Year 0 0 Day 5 Ø October **April** Month \mathcal{O} Saturday E P **September** 🐏 March **1** 790 Friday Wednesday Thursday A October 🏷 February 🖨 August Tuesday Monday **A**January √Jul **3 1 1 1 1 1** N NE Sunday

WEDNESDAY'S WORKOUT

Seeing Doubles & Neighbors

Overview

In this lesson, the teacher introduces a new set of cards in which bugs are organized into ten-frames to illustrate the addition combinations we often call "doubles" (I + I, 2 + 2, 3 + 3, and so on), along with a set in which the bugs have been placed to show neighbors, or doubles plus or minus one (2 + 1, 3 + 2,4 + 3, and so on). Once all the cards have been set out in the pocket chart, children scan them to locate the doubles. After making some observations about these cards, they locate the neighbor for each double. The teacher then guides them in verbalizing and writing a number sentence for each card.

You'll need

- ★ Doubles & Neighbors cards
- ★ pocket chart
- ★ student chalkboards, chalk, and erasers or white boards and pens

Skills

- ★ exploring "doubles" within tenframes (I + I, 2 + 2, 3 + 3, etc.)
- ★ finding the neighbors for each double (I more or less than the double)
- ★ writing standard notation for adding doubles and neighbors



Double 3 + 3 = 6



Neighbor 2 + 3 = 5

Note This lesson and many others in the Number Corner are based on the work of the late Bob Wirtz, who first introduced us to the idea of ten-frames. Author of Making Friends with Numbers and many other wonderful books, Bob believed in helping children learn basic facts by highlighting the relationships between easily learned combinations, such as doubles, to more difficult combinations, such as neighbors. We find that a surprising number of first graders work from number facts they already know whenever possible. Some have already developed the doubles and neighbors strategy for themselves, even this early in the year. ("I know that 4 + 3 is 7 because 3 + 3 is 6, and 1 more is 7.") Although each child will eventually construct his or her own fact strategies, it certainly doesn't hurt to model of few of them, especially using visual models like the bug cards featured here.

Wednesday Challenge I (cont.)

Begin the lesson by posting all of the doubles and neighbors bug cards in your pocket chart. Ask the children to search out the cards that picture doubles, 1 + 1, 2 + 2, 3 + 3, 4 + 4, and 5 + 5. Arrange these cards in a column and ask children to share observations about each.

Teacher What do you notice about the doubles card at the top of the column?

Children It's 5 praying mantises and 5 beetles. It's 5 + 5. That makes 10.

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Teacher What do you notice about the next card?

Children It's 1, 2, 3, 4, 5, 6, 7, 8. If it had 2 more, it would be 10. 4 and 4 makes 8. It's almost 5 + 5.

Teacher And the next card?

Children 3 and 3—that's 6. Every bug has a partner. Hey—these are all even numbers! 1, 2, 3, 4, 5, 6—I'm 6 too!

Children This is easy—it's 2 and 2.4!6 empty boxes.

Children This is the little one. It only has 2. Even babies know 1 + 1 = 2.

Once they've examined all the doubles, ask children to find the neighbor card for each one, that is, the card that pictures one less bug. (We define neighbors as one more or one less than the double.)

Wednesday Challenge I (cont.)

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Doubles

Neighbors

Help children generate a number sentence for each of the neighbor cards, working from the top row to the bottom each time, as you point.

Finally, show one bug card at a time and ask children to write a number sentence to match the card on their chalkboards.

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茶	茶	茶	茶	



Wednesday Challenge 2



Doubles & Neighbors A Match Game

Overview

In this lesson, the teacher distributes a collection of number sentences and asks children to find the doubles or neighbors bug card to match each sentence. Children then practice reading and answering each number sentence.



You'll need

- ★ Doubles & Neighbors cards
- ★ Doubles & Neighbors number sentences
- ★ pocket chart

Skills

- ★ matching visual models of doubles and neighbors to number sentences
- ★ practicing adding doubles and neighbors

Hand out the bug cards, one per student, and ask these children to stand in a line facing the class. Then hand out the number sentence cards to some of the children who are still seated. Call on one youngster at a time to find his or her match. Ask the class to help as needed. Display that pair of cards in the pocket chart, and call on another child to find his or her match. Continue until all the cards have been matched and posted.



Finally, take all the number sentence cards out of the pocket chart and show them to the children one by one. Ask everyone to read the number sentences together as you show them. Shuffle these cards and hand them out. Ask students to take turns reading them to the group in question form, that is, "2 plus 3 equals?" Have children respond with the answer and then ask the student reader to turn the card to the group to confirm.

October

Wednesday Challenge 3

WEDNESDAY'S WORKOUT

Bugs Doubles & Neighbors Worksheets & Flashcards

Overview

Students match doubles and neighbors pictures and number sentences in their Student Books and then cut out sets of doubles and neighbors flashcards so they can practice these facts with their classmates.

You'll need

- ★ Student Book, pages 7 and 9
- \star scissors and glue
- \star envelopes

Skills

- ★ matching visual models of doubles and neighbors to addition sentences
- ★ practicing doubles and neighbor addition facts



Hand out the Doubles & Neighbors worksheet first, or have children find it in their Student Book. Explain that they'll need to cut around the number sentence boxes at the bottom of the sheet and glue them below the appropriate bug cards at the top of the sheet. Remind students to cut all the way around the entire collection of number sentences first and then cut the individual boxes apart.



Wednesday Challenge 3 (cont.)

As children finish the worksheet, have them cut apart the flash cards on their second sheets. They should use these cards to practice the doubles and neighbors facts with someone else who is finished. (You might want to model how to practice number facts with another person if your students haven't done this sort of thing before.) Send the flash cards home in an envelope, along with the completed worksheets, for children to share with their families.











Make I copy on cardstock. Color. Cut apart on thin lines. Laminate.



2 bumber Corner Doubles & Neighbors Number Sentence	2 =	: 4
2 - - Number Corner Doubles & Neighbors Number Sentence	3 =	5

■ Number Corner Doubles & Neighbors Number Sentence	The second secon	8
■ Number Corner Doubles & Neighbors Number Sentence	5	9



Cut around the number sentence boxes at the bottom of the page. Put each number sentence under the right bug card. Then glue them down.

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茶	茶茶	茶い		





3 + 3 = 6	4 + 4 = 8	5 + 5 = I0
4 + 5 = 9	3 + 4 = 7	2 + 2 = 4
+ =2	2 + 3 = 5	I + 2 = 3



Instructions for Making the Calendar Markers

The September calendar markers have been made for you. (These markers will serve for both August and September.) For the remainder of the school year, we strongly recommend that you have students make the calendar markers each month by cutting and gluing construction paper. The markers they make must be smaller than $4^{1}/_{2}$ " by $4^{1}/_{2}$ " in order to fit on the calendar grid. You can choose markers that will support your instructional themes each month, or have children participate in brainstorming and decision-making. Your markers can also focus around some or all of the math themes that appear throughout the year in *Bridges*, Grade 1.

Unit One: Bugs Galore Unit Two: From Land to Sea Unit Three: Lobster Legs & Whale Tails Unit Four: Penguins Unit Five: Pattern Blocks, Polydrons & Paper Quilts Unit Six: My Little Farm

After we've chosen our marker ideas, we like to prepare samples in front of the children and then let them choose which kind they'll make. Depending on the size of our class, a few of the students may need to make more than one marker, but initially everyone makes their one favorite during an arts and crafts period a day or two before the new month. We start by introducing the marker ideas and having children do some sketching on their chalkboards.

Teacher This month, we're going to be working with sea stars and crabs in math so I thought our calendar could be quite spectacular with crabs and sea stars that you create. Let's try drawing some of these creatures on our chalkboards.



Once the children have had some practice sketching the featured characters, we have them draw the same items on colored construction paper. Sometimes it works better if students use two pieces of construction paper, cutting the body from one and the legs from another, and then gluing the pieces together. We make sure youngsters understand that they need to make their markers large enough so everyone will be able to see them from across the room. We also ask them to write their names on the backs of their creations so we'll know who made each marker. During Number Corner the next day, we have our students group the pieces by kind and lay them out for everyone to admire.



Teacher What wonderful sea creatures you made! We have to figure out a pattern that would work on our calendar next month. What do you think we should try?

Children We could do sea star, crab, sea star, crab.

Teacher That's a good idea. Let's see if that would work.

We like to follow children's suggestions and have them help lay out the pattern until we run out of one or another of the pieces.



Children Oh, oh! We don't have enough crabs. Maybe we could make some more. We could just finish it with sea stars and no crabs.

Teacher I would like the entire calendar to be the same pattern. Your suggestion to make some more crabs would work. I'm wondering if there's any other pattern that would work without having to make so many crabs. They're tricky to make.

Children There are more sea stars. Let's do crab, sea star, sea star and see if that works.



Teacher Now we have extra crabs, but it will be easier to make more sea stars. We need 30 pieces altogether. Can you figure out what we'd need to make?

Children Can we put a cube for every place we need a sea star to see how many we need?

Teacher Good idea!

As you can imagine, this lesson usually runs past the 10 to 25 minutes we allot to Number Corner, but it offers opportunities for powerful problem solving and we don't feel badly leaving out something else for a day. Each month generates some new ways of looking at how to figure out the pattern based on the numbers of different pieces children have chosen to make. Sometimes, we suggest more than two possible markers in order to make the problem still more complex. We suggest you jump in with both feet and see where it goes with your class.

Once the pattern is determined, glue on the number squares (Blackline NC 31–32), and store the markers near the calendar grid to be posted throughout the month.
































































Daily Routines & Daily Challenges N December **Days in School** How Many Altogether? ر بر **بر** 5 + 5 + 5 = 15 10 +5 = 15 The Days In School **Movember** 🆓 May en? Days this Month 6 Year 0 11 N. B _____ ((°` Ø October **April** Z Month σ N 8 Saturday 4 **September** Aarch 2 Friday ð 9 Thursday 0 C September Wednesday 🏷 February hο 5 🖞 August N7 Tuesday <u>m</u> Monday 🕭 January ×July <u>ل</u>ا Sunday

The Calendar Grid

Skills

- ★ counting from I–3I
- ★ reading numerals from I–3I
- ★ recognizing, describing, and extending number patterns

You'll need

- ★ Calendar Grid chart
- ★ Month and Year calendar grid cards
- ★ Insect Calendar Markers
- ★ Month/Day/Year recording chart
- ★ overhead marking pen

Introducing the Calendar Grid on the First Day of School

Open your very first Number Corner lesson by seating children close to your display. When all are settled, call their attention to the calendar grid and explain that you'll put up a new marker as each day of the month passes. Their job will be to predict what each day's marker will look like. Unless school has started on the very first day of the month, you'll already have some insects posted. Ask children to study the pattern so far and predict today's insect. (You'll probably need to spend a bit of time identifying the three insects as this discussion opens.)

di August								
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday		
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	-	A		- Alt	A	The second second		
8	5/219	10		⁵ / ² / ₁₂	13	14		
1) JCA 15	16	17 I7	77,18	19	20	1) FCT 21		
22								

The Calendar Grid (cont.)

Teacher What do you notice about our calendar grid?

Children It's filled with bugs! I see a butterfly at the top! That green one is really big!

Teacher It certainly is. Does anyone know what it's called?

Taj-Michael It's one of those praying things. I have one in my book at home.

Teacher That's right. It's called a praying mantis. Does anyone know what the next insect is?

Kalifa Is it a beetle?

Teacher Yes it is. I'll point to each insect on the grid and we'll say their names together.

Children and Teacher Butterfly, mantis, beetle, butterfly, mantis, beetle, butterfly, mantis, beetle.

Kent Can I tell you something? It's going in a pattern—it's the same thing over and over. We made patterns like that in kindergarten.

Teacher That's an interesting observation, Kent. Can you use that information to predict what today's bug will be?

Children It's going to be a praying thing! A mantis! No, a beetle!

Teacher Anna, would you be willing to share your prediction?

Anna Mantis—it's going to be a mantis!

Teacher How did you figure that out?

Anna I counted from the top. I went butterfly, mantis, beetle, butterfly, mantis, beetle. I kept going and going until I got to today.

Teacher Did anyone have a different way to figure it out?

Sophie I looked and saw that the last picture was a butterfly so then I knew that a mantis came next.

Tommy Wait a minute! Look up and down—it starts again.

Samuel (holding up a ruler) *It's all butterflies. It's all the green guys. Then it's all purple guys.*

The Calendar Grid (cont.)



Once children have had a chance to discuss their observations and predictions, post the day's marker and then move on to identify the day and the date. In order to help children identify the name of the day, we like to sing a simple song to the tune of "Alouette, Gentille Alouette."

Sun-day, Mon-day, (Al-lou-et-te,) Tues-day, Wednes-day, Thurs-day, (Gen-tille Al-lou-et-te) Fri-day, Satur-day, (Al-lou-et-te,) Then it starts again. (repeat) (Je-te-plumerai)

We point to the boxes on the calendar grid beginning with the very first Sunday as the song begins and continue singing until we get to the current day. Once they've named the day, we ask children to identify the number on the marker.

Teacher Today is Monday all right. What number do you see on this mantis?

Children It's a 23! No, wait! it's a 32! Teacher How can we find out for sure? Gemma I know! Let's count!

Continuing Through the Months with the Calendar Grid

By the second or third day of school, the Calendar Grid will take less time, and within a week or so the routine will probably have settled into a comfortable rhythm. Generally, we like to open with the days of the week song ("Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, then it starts again," and so on). Once the name of the day has been identified, we have children predict what the day's marker will look like and what number

The Calendar Grid (cont.)

it will have on it. After they've discussed their predictions and we've posted the marker, we read the date together and write the information in abbreviated form on the Month/Day/Year recording chart, as described below.

August								
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday		
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8	Jan 9	10		JU 12	13	14		
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Teacher Today is Friday, August 27, 2010. Let's figure out how to write that date the abbreviated (shortcut) way on our recording chart.

Pointing to the Month Heading cards you have posted near the Calendar Grid, count the months from January to August so that students understand why August is referred to as the 8th month of the year. Explain that this is the 27th day of the month and the year is abbreviated by writing the last two numbers. Write this information on the Month/Day/Year recording chart with an overhead marking pen.



Although many students will soon learn to identify August as the 8th month of the year and September as the 9th, we like to read the month names aloud every so often so children become familiar with them.

*January	着February	Sea March	[™] April	 [®] May	¢åJune
≫ July	d August	🔭 September	ØOctober	November	* December

Note If your school year starts in August, we recommend that you use the insect markers in both August and September. At the end of August, simply remove the markers from the Calendar Grid and post them again during the month of September. This gives students another chance to understand the pattern as they find ways to make predictions and solve simple problems (e.g., Yesterday's marker was a mantis. What will today's be? Our field trip is on Friday—which insect will we see on the marker for that day?)

Daily Routines & Daily Challenges $\bullet \bullet \bullet$ 92 Mecember 1 **@June** (5+5)+(5+5)+(5+5)+2=32 6 **Days in School** How Many Altogether? 10 + 10 + 10 + 2 = 32 30 + 2 = 32 The Days In School **Movember** 🆗 May Days this Month Year 0 0 Day 5 Ø October **April** Month \mathcal{O} Saturday E P **September** 🐏 March **1** 790 Friday Wednesday Thursday A October 🏷 February 🖨 August Tuesday Monday **A**January √Jul **3 1 1 1 1 1** N NE Sunday

Thursday Challenge 4



Unifix Cubes Ten & More

Overview

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The "teen numbers" in our system confuse many young children. Fifteen? Does that mean 50? 12? What does that stand for? Although it's too late to change number names now, we often think that if the teen numbers had been called "tenty-one, tenty-two, tentythree," and so on, it would have been easier for children to understand that teen numbers refer to a quantity of ten and some more. This lesson addresses the issue by asking children to build teen numbers with Unifix cubes. For some, this will be a new concept.

Note This activity may take too much time if you don't keep the pace fairly rapid. Try to cover the territory in I0 minutes or so.

You'll need

- ★ Unifix cubes (20 per student—if you give students each a single color, they may not be so tempted to build patterns with their cubes)
- ★ Ten & More number sentences

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★ an individual white board or chalkboard for each child to use as a work mat

Note You'll find it easier to distribute Unifix cubes quickly if you ask children to snap them into trains of I0 in single colors each time they put them away.

Skills

★ building and exploring numbers from II-20 in I0's and I's to match number sentences

Begin the lesson by asking children to snap one train of 10 Unifix cubes together. They'll need to leave the other 10 as singles and set the entire collection to one side of their work mats.



When everyone is ready, ask them to set 13 cubes on their mats. Don't be too surprised if some of your children break up their train of 10 and set out 13 individual cubes. Thinking and working in 10's and 1's rather than counting one by one is a huge leap. If you have students who set out the quantity very quickly, using the stack of 10 and 3 more, be sure to ask them about their method. (If no one in your group uses this strategy, you'll want to model it

Thursday Challenge 4 (cont.)

yourself, not as the right way to do it, but simply as another option. It's so much more efficient than counting one by one that you'll find the children who are able will gravitate to this method, even though they may continue to confirm their totals by counting in 1's for some time to come.)

Teacher Some of you were able to do that very quickly. How did you figure it out?

Children You just get a 10 and then 3 more. See-1, 2, 3, 4, 5, 6, 7, 8, 9, 10-11, 12, 13.

Sophie You can count it fast if you say 10-11, 12, 13.

Continue calling out different teen numbers and soliciting counting strategies.

Teacher Please change that 13 to 17. **Children** We need some more. I can't count that fast. 4 more. 3 + 4 is 7. I just said 13–14, 15, 16, 17 and picked up a cube each time.

Are some children able to make the adjustments to the new number efficiently or are most putting everything back before they set out the new quantity? Students' comfort with tasks like this gives you a window into their growing number sense. *Bridges* and the *Number Corner* deal with ten and more in many ways. Children who may have struggled in this session will have many opportunities to work with this concept.

Finally, hold up the number sentence cards one at a time and ask children to build a few with cubes. Then pose each as a problem and ask children to call out the answers before they put things away.



If there are five Thursdays this month, consider the needs of your students and review as needed.