

# Exploring Time

## Hours, Minutes and Paper Clocks



Excerpts From Bridges in Mathematics

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## Exploring Time: Hours, Minutes and Paper Clocks

A Math Learning Center Publication

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illustrated by Tyson Smith

### Bridges Breakout Units

Bugs Across the Curriculum

Crossing the Pond: A Probability Game

Exploring Money: Adding, Counting, Sorting and Patterning

Exploring Time: Hours, Minutes and Paper Clocks

Frogs Across the Curriculum

Geometry: Pattern Blocks, Polydrons and Paper Quilts (Grade 1)

Geometry: Shapes, Symmetry, Area and Number (Grade 2)

Math Buckets: Sorting and Patterning

Math with a Sock: Probability and Fractions

My Little Farm: Money, Place Value and Mapping

Penguins: Measuring, Sorting, Computation and More

Sea Creatures Across the Curriculum

QP192 P0802

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## Blackline Masters

- 1 Student Clock
- 2 Number Cards, 1–6
- 3 Number Cards, 7–12
- 4 Ladybug

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## Overheads

- 1 Tell the Time
- 2 An Hour or Bust! record sheet
- 3 Counting by Fives on the Clock

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## Student Book

- Tell the Time
- An Hour or Bust! record sheet
- Counting by Fives on the Clock
- Looking at 5's on the Clock
- Clocks & Labels



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## **Economy Materials Masters**

Hour Clocks

Hour Time Cards

Half Hour Clocks

Half Hour Time Cards

Quarter Hour Clocks

Clock Fractions

Quarter Hour Time Cards



# Bridges Breakouts

## **Exploring Time** Hours, Minutes and Paper Clocks

In these 22 sessions, children practice telling time to the hour, half hour, and quarter hour and learn the numbers on the clock face. Sessions are designed to be taught in sequence. They can be taught back-to-back or spread over a longer period of time. The “You’ll need” list outlines supplies you need to gather in order to conduct the lessons. Deluxe Breakout contents are also listed; those who purchased an Economy Breakout will need to collect these items as well.

### **You’ll need**

- ★ overhead projector
- ★ overhead pens (4 different colors)
- ★ poster board (2 different colors)
- ★ brass fasteners
- ★ tape player
- ★ pocket chart

### **Deluxe Breakout includes**

- ★ Hour Clocks
- ★ Hour Time Cards
- ★ Half Hour Clocks
- ★ Half Hour Time Cards
- ★ Quarter Hour Clocks
- ★ Clock Fractions
- ★ Quarter Hour Time Cards



# Challenge I



## EXPLORING TIME

### Making Paper Clocks

#### Overview

In this lesson, students examine the classroom clock and share observations. Then 12 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 paper 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 1–12

#### You'll need

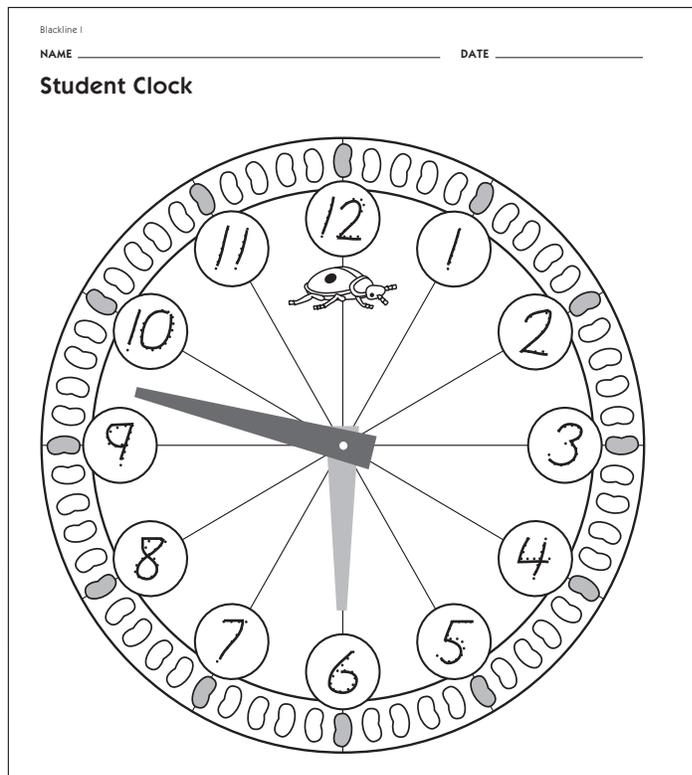
- ★ Student Clock (Blackline 1, run a class set of clocks on cardstock or construction paper, plus a few extras for yourself and any late entering students)
- ★ Number Cards, 1–12 (Blacklines 2–3, run 1 copy of each sheet on cardstock and cut apart.)
- ★ a ladybug (Blackline 4, run a copy on red paper and trim)
- ★ pencils
- ★ poster board in 2 different colors to make clock hands
- ★ a nail or school compass and some brass fasteners

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.

**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 the next session 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  $\frac{1}{2}$ "  $\times$  4" poster board strips (for the minute hands) and  $\frac{1}{2}$ "  $\times$   $3\frac{1}{2}$ " 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 throughout the Time breakout.



# Challenge 2



## EXPLORING TIME

### Telling Time to the Hour on the Paper Clocks

**Overview**

Today the children explore telling time to the hour with their paper 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
- ★ "Learning Basic Skills Through Music," Volume 2, audiotape by Hap Palmer, "Paper Clock" song
- ★ tape recorder

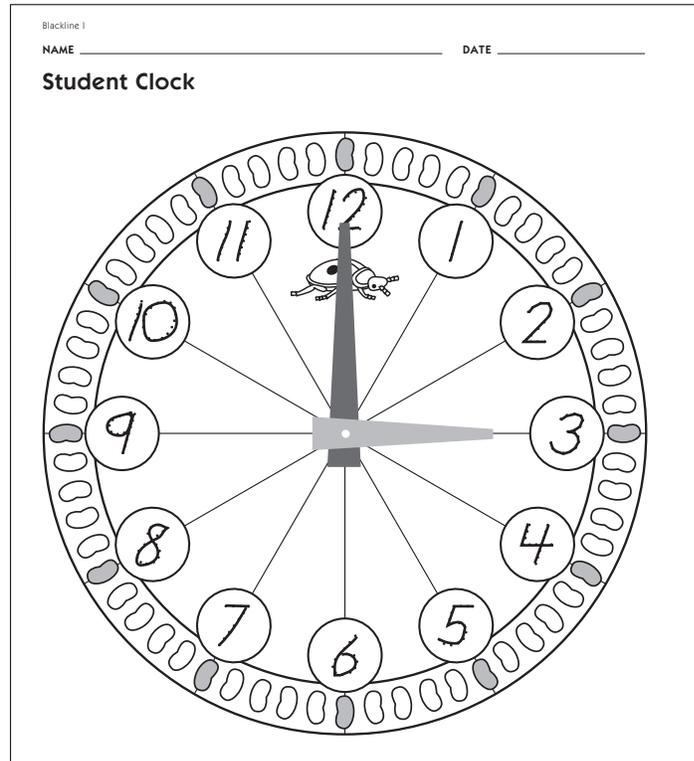


Words to "Paper Clock"

I am a paper clock I am,  
 but I cannot move my hands,  
 how I wish that I could tell the time.  
 If you could help me move my hands,  
 that would be just grand.  
 If you could help me tell the time,  
 everything would be just fine.

I want to say 3 o'clock.  
 Move my hands to 3 o'clock.

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?

**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 Clock," a song from the Hap Palmer "Learning Basic Skills Through Music, Volume 2" tape. 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 paper clocks in a basket where you can safely store them for future lessons.

## Challenge 3



### EXPLORING TIME

## Time to the Hour on the Paper Clocks

### Overview

In today's session children review telling time to the hour.

### Skills

- ★ exploring the numbers and their positions on a clock face
- ★ telling time to the hour

### You'll need

- ★ Number cards, 1–12 (Use the cards you made for Challenge 1, or see Blacklines 2–3 to make a new set.)
- ★ a paper ladybug (Blackline 4)
- ★ student clocks
- ★ Hap Palmer tape set to play "Paper Clocks"

In this challenge 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.



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 the Paper Clocks song and encourage children to sing along as they set their clocks to the hour.

## Challenge 4



### EXPLORING TIME

## Clocks & Time Cards A Matching Game

### Overview

In this lesson, the teacher introduces a set of 12 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.

### You'll need

- ★ Hour Clocks
- ★ Hour time cards
- ★ pocket chart
- ★ your key ring

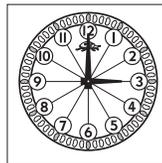
### Skills

- ★ telling time to the hour
- ★ matching clock faces to time cards

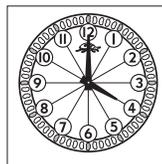
Begin the session by showing children the clock cards. What time is it on each clock? Show them a couple of the time cards. Can they read what these cards say?



Once they're familiar with the 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.



**3:00**  
three o'clock



**4:00**  
four o'clock

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.

## Challenge 5



### EXPLORING TIME

## Telling the Time

### Overview

Today's session will serve as a review of the last few time sessions.

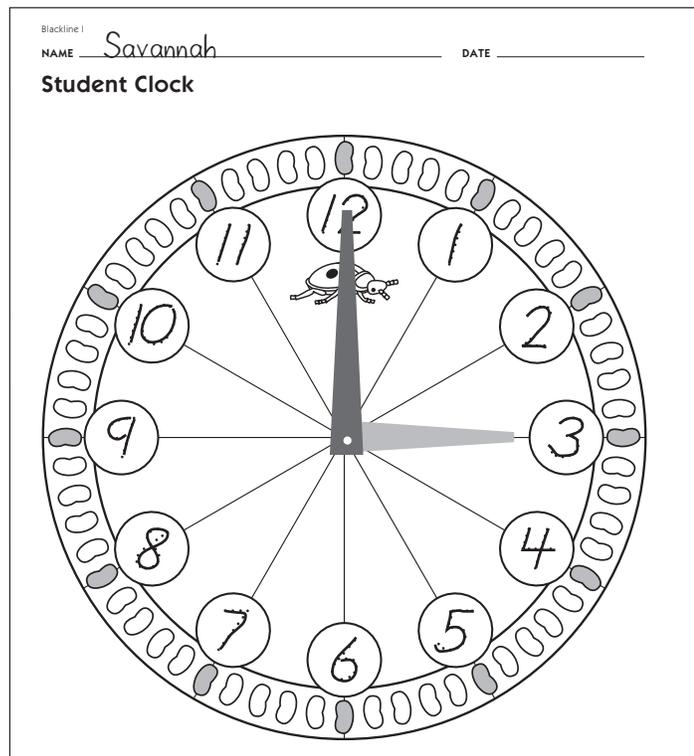
### Skills

- ★ telling time to the hour
- ★ matching clock faces and time cards

### You'll need

- ★ student clocks
- ★ Hap Palmer tape set to play "Paper Clocks"
- ★ Hour Clocks
- ★ Hour time cards
- ★ pocket chart
- ★ your key ring

Begin the lesson by handing out the student clocks and telling time to the hour with the Hap Palmer "Paper Clocks" song.



Then have children match the clock and time cards as a quick partner game and display the cards on the pocket chart in pairs.

## Challenge 6



### EXPLORING TIME



## Tell the Time

### Overview

In this activity, children tell time to the hour on their paper clocks as they sing Hap Palmer's song. They work at the overhead then on their worksheets to practice this skill.

### You'll need

- ★ student clocks
- ★ "Paper Clocks" song
- ★ Tell the Time (Overhead 1)
- ★ Student Book, page 1

### Skills

- ★ telling time to the hour
- ★ drawing hands on clock faces for a given time (to the hour)

Begin this lesson by distributing students' clocks. Turn on the tape recorder and let them sing along with Hap Palmer as they turn the hands on their clocks. This song serves as an excellent review of time on the hour, and most children really enjoy singing it. Once the song is finished, collect the clocks and show students your Tell the Time overhead. Call on a student to come and draw in a minute hand pointing to the 12 and an hour hand pointing to another number on the first clock. Once the hands are drawn, ask children if they can tell which is the short hand and which is the long hand. If not, have your volunteer make any needed adjustments. What time does the clock show? Record it in the box below the clock.

Overhead 1

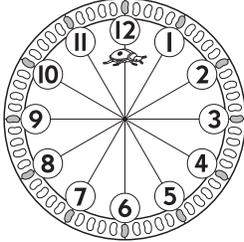
### Tell the Time

 Draw a long hand pointing to the 12. Draw a short hand pointing to one of the other numbers. Tell the time.



7

o'clock



□

o'clock

Continue calling on students to draw the hands on each clock. Do the hands make it clear that the clocks are telling time to the hour? What time does

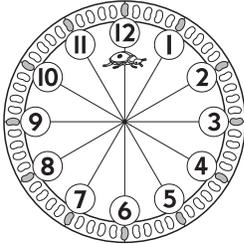
### Challenge 6 (cont.)

each clock say? Finally, hand out copies of the student worksheet and ask children to draw the hands on each clock and write the time underneath. Circulate and help as needed. If your students don't have individual student books, you may want to collect these papers and save them in work folders as another indication of student progress.

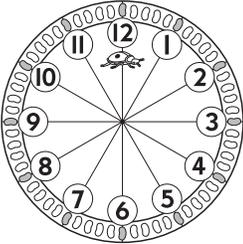
Student Book  
 NAME Joshua DATE 11/7

**Tell the Time**

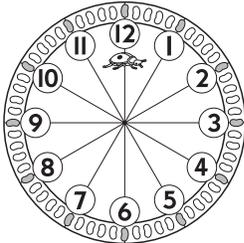
 Draw a long hand pointing to the 12. Draw a short hand pointing to one of the other numbers. Tell the time.



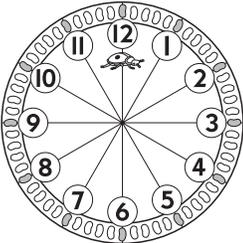
o'clock



o'clock



o'clock



o'clock

## Challenge 7



### EXPLORING TIME

## Half Hour Clocks

### Overview

In this activity, the teacher shows children how to set their paper clocks to the half hour.

### You'll need

- ★ student clocks
- ★ a paper clock for yourself

### Skills

- ★ learning to tell time to the half hour

Distribute the student clocks for a brief lesson on telling time to the half hour.

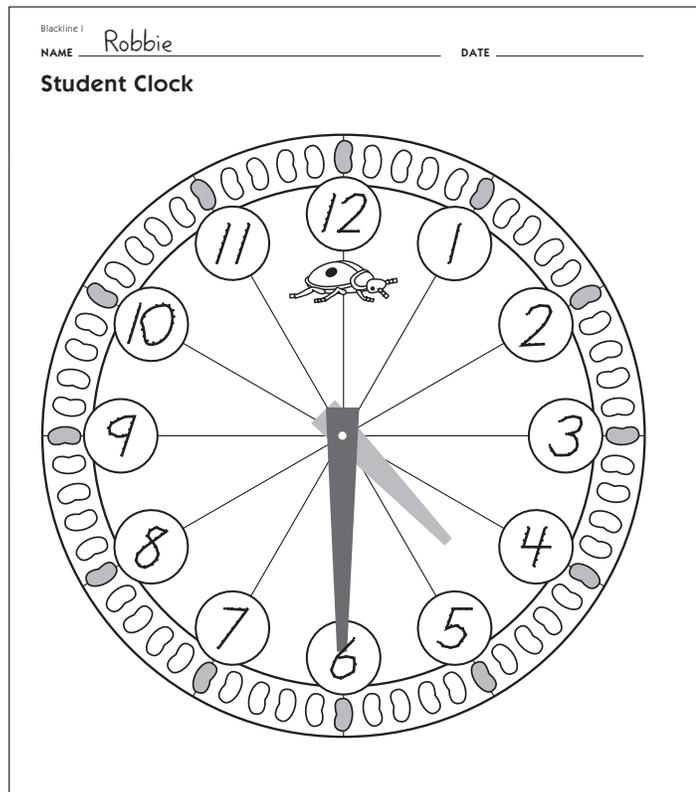
**Teacher** *Today we're going to work on telling time to the half hour. Does anyone know anything about the half hour?*

**Children** *A half hour is half way around the clock. It's just half way around the circle on the clock. My dad told me it's 30 minutes, 'cause 30 minutes is half of 60. My favorite show on TV lasts half an hour.*

**Teacher** *Great! We're going to use our clocks to show the half hour, and it's the minute hand that's going to do most of the work. If we were to start on the 12 and turn this minute hand half way around the clock, what number would it land on?*

**Ben** *On the 6! That's half on a clock!*

**Teacher** *Good! Can you all turn your minute hand to the 6? Now I'd like you to turn the hour hand so it points to the 4. Now move it just a little further—so that it points half way between the 4 and the 5. Take a look at my clock to help you see what to do.*

**Challenge 7** (cont.)

**Teacher** When the minute hand has gone halfway around the clock and the hour hand has moved halfway between 2 numbers, we say it's half past. Right now, our clocks show half past 4.

**Children** I did it.

Me too.

My little hand keeps falling down. I'll have to hold onto it.

Maybe you should make that fastener tighter on the back.

**Teacher** Good job, everybody! Can you make your clocks say half past 8?

Continue in this manner for a few minutes working with time to the half hour.

## Challenge 8



### EXPLORING TIME

## Clocks to the Half Hour

### Overview

In this activity, the teacher displays a collection of pocket chart cards that show clock faces set to various half-hour times. As he posts each on the pocket chart, the children set the hands on their paper clocks to match.

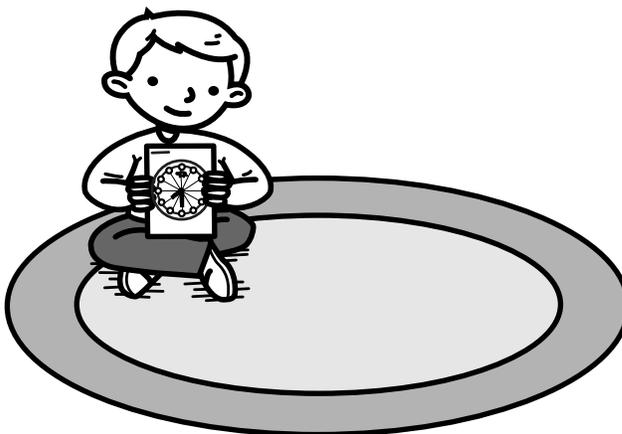
### You'll need

- ★ student clocks
- ★ Half Hour Clocks
- ★ pocket chart

### Skills

- ★ setting clocks to the half hour
- ★ matching half hour clock faces and time cards

Today, you'll review "half past" the hour again but this time, you'll display a Half Hour card, ask children to figure out what time it is, and then have them set their clocks to the same time. After you've done that for four or five cards, ask children to set their clocks to 8:30. Once they've done that, show the 8:30 clock card so they can check their own clocks. Encourage them to help one another throughout this quick lesson.



## Challenge 9

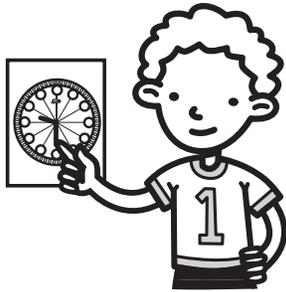


### EXPLORING TIME

## Clocks & Cards A Match Game

### Overview

The teacher leads children in a review of setting time to the half hour on their paper clocks and then hands out the half past clock and time cards for a round or two of a match game.



### You'll need

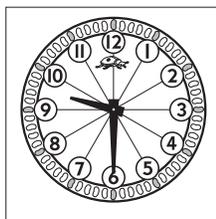
- ★ student clocks
- ★ Half Hour Clocks
- ★ Half Hour time cards
- ★ your key ring or some other auditory signal
- ★ pocket chart

### Skills

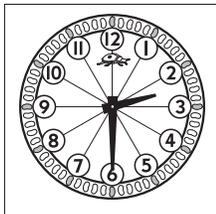
- ★ reading half hour time cards and setting clocks to the indicated time
- ★ matching half hour clock faces and time cards

Begin today's session with a quick review of time to the half hour using your Half Hour Clocks and student clocks. Hold up one clock card at a time and have children set their clocks to match. Then switch to the time cards. Can children set their clocks to the correct time that way?

Finally, hand out the Half Hour Clocks and time cards and jingle your keys while children find the correct matches. Have them bring their cards to the pocket chart a pair at a time.



**9:30**  
half past nine



**2:30**  
half past two

## Challenges 10–12



### EXPLORING TIME

## Clock Faces & Times A Match Game

### Overview

In this activity, children revisit the match game as a way to review time to the hour and the half hour.

### Skills

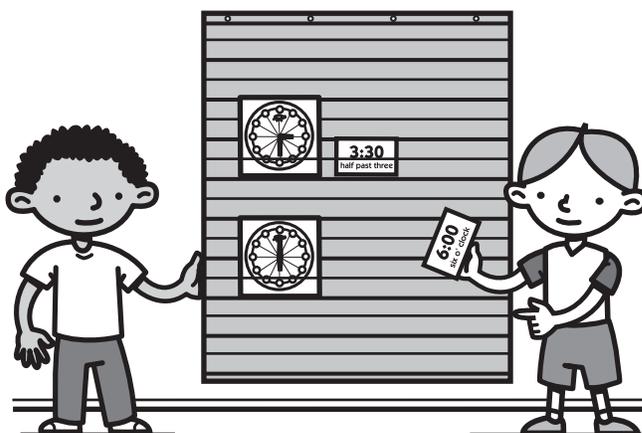
- ★ setting clocks to the hour and half hour
- ★ matching clock faces and time cards

### You'll need

- ★ a paper clock (Use your own or borrow one of the students' clocks)
- ★ Hour Clocks
- ★ Hour time cards
- ★ Half Hour Clocks
- ★ Half Hour time cards
- ★ your key ring
- ★ pocket chart

Spend a couple of minutes reviewing time to the hour and the half hour on your paper clock and then hand out the clock and time cards.

Jingle your keys and have children look for clock and time cards pairs. As soon as children find their partners, have them sit together near the Number Corner display. Invite a pair at a time to bring their cards to the pocket chart. Are the matches correct? What time does each clock say?



## Challenge 13



### EXPLORING TIME

## Clocks On the Hour & Half Past

### Overview

In this lesson, a repeat from earlier, children review telling time to the hour and half hour on their paper clocks and then play the match game with the sets of clock and time cards.

### Skills

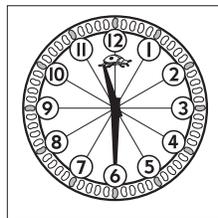
- ★ telling time to the hour and half hour
- ★ matching clock faces and time cards

### You'll need

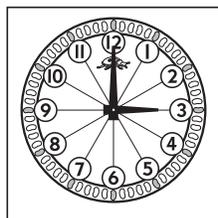
- ★ student clocks
- ★ Hour Clocks
- ★ Hour time cards
- ★ Half Hour Clocks
- ★ Half Hour time cards
- ★ your key ring
- ★ pocket chart

Spend a few minutes reviewing time to the hour and “half past” the hour with students on their paper clocks. Afterwards, hand out all of the clock and time cards to students so they can play a match game.

Jingle your keys and have children search out the classmates holding cards that match theirs. Once all the matches have been found, have students sit with their partners on the rug. Invite a pair at a time to bring their cards to the pocket chart. Are the matches correct? What time does each clock say?



**11:30**  
half past eleven



**3:00**  
three o'clock

## Challenges 14–15



### EXPLORING TIME



## An Hour or Bust!

### Overview

An Hour or Bust! deals with counting by 5's on the clock. In this version of the game, the teacher plays the students. The teacher and students take turns spinning and coloring the indicated number of minutes on a clock face. The team that comes closest to coloring in 60 minutes without going "bust" wins.

### Skills

- ★ counting time by 5's
- ★ reading a clock
- ★ comparing quantities

Show children the An Hour or Bust! overhead. Review the idea of counting by 5's on the clocks and draw their attention to the "beans" which show groups of 5. Explain that they'll play as one team against you. The team that comes closest to coloring in 60 minutes on a clock face without going over that amount wins. Look over the spinner. Where would you like the arrow to land if you had only two turns? three turns? (Four turns is the maximum allowed, but players on either team can decide to stop spinning at any time.)

Distribute record sheets, pencils, and crayons and ask the children to fill in their record sheets as you work at the overhead. That way, students will have a good look at the 5's on their clocks. They'll also be able to see how many minutes accumulate as they color them in on the ten-strips.

To start the game, spin the spinner on the overhead and record the number of minutes in the first box below your clock face. Using your first crayon, color in that number of minutes on your clock and on the ten-strips below the clock face. How many more minutes do you need to reach 60?

Invite one of the children to the overhead to spin for the Students' Team. Help her record the number of minutes in the box below her team's clock face. Then have her color that number of minutes on the clock face and the ten-strips.

The teams continue taking turns, changing crayon colors with each new turn, until both teams decide not to spin. Stop periodically to compare scores

### You'll need

- ★ An Hour or Bust record sheet (Overhead 2)
- ★ overhead pens in 4 different colors
- ★ Student Book, page 2
- ★ a pencil and crayons in 4 different colors for each student
- ★ a hard writing surface for each student

## Challenges 14–15 (cont.)

and figure out how many more minutes each team needs to reach 60. Encourage some strategic thinking if one team is in a risky situation toward the end of the game.

**An Hour or Bust!** record sheet

The record sheet includes two circular spinners with numbers 1 through 12. A central die has faces with numbers 5, 10, 15, 20, 25, and 30. Below the spinners are two scorekeeping sections: 'Teacher's Score' and 'Students' Score'. Each section has a row of boxes for scores and two columns of vertical bars for tracking progress. The 'An Hour' column has 6 bars, and the 'Or Bust!' column has 6 bars. A cartoon alarm clock character is also present.

**Teacher's Score**

10	15	30	
----	----	----	--

**Students' Score**

25	5	20	
----	---	----	--

**Rachel** You've got all but 5 minutes. Are you going to spin again?

**Teacher** I think I'll hold. My chances of spinning that 5 are pretty low since there's only one 5 on the spinner and all the other numbers would make me go bust. I'd really like to beat you this time. What about you, what will you do?

**Children** You'll win unless we spin again.

We need to get that 10 or two 5's.

But we could go bust if we get a 15, 20, 25, or 30.

That's not so good. But we lose either way.

Let's spin. Maybe we can get a 5 or a 10. That way, we might win.

If a team goes beyond the 60 minutes, the total is recorded on the "Or Bust!" side of the record sheet. This game offers so many learning opportunities that we recommend playing it again next week.

## Challenge 16



### EXPLORING TIME

## Counting by 5's on the Clock, Part I

### Overview

In this lesson, children review telling time to the hour and half hour. The teacher uses an overhead to reinforce the idea of counting by 5's to find out how many minutes the long hand is showing.

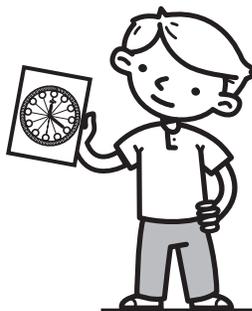
### You'll need

- ★ Counting by 5's on the Clock (Overhead 3)
- ★ overhead pens
- ★ the student clocks
- ★ the Hap Palmer "Paper Clocks" song (optional)

### Skills

- ★ telling time to the hour and half hour
- ★ counting by 5's

Hand out the student clocks and begin the session by reviewing time to the hour with the "Paper Clocks" song. Quickly review telling time to the half hour. Then guide students to move the minute hand around their paper clocks from one number to the next, counting by 5's as they do so.



Next, have children sit where they can see the overhead and display Counting by 5's on the Clock. What number is the hand pointing to on Clock A? How many minutes is it past the hour? Explain that you want to fill in the ten-strips to match the number of minutes that the hand has moved on the clock since it left the 12. How many 5's will you need to color? Do the ten-strips help children to see how many minutes have gone by on the first clock?

### Challenge 16 (cont.)

**Counting by Fives on the Clock**

**A**

How many minutes past?

**B**

How many minutes past?

**C**

How many minutes past?

Ask students to help you fill in the ten-strips below each of the other two clocks. How many 5's have gone by on Clock B? How many minutes is that? What about on Clock C?

# Challenge 17



## EXPLORING TIME



### Counting by 5's on the Clock, Part 2

#### Overview

Children each complete a worksheet similar to the overhead the teacher presented last session.

#### Skills

- ★ counting by 5's on the clock

#### You'll need

- ★ Counting by 5's on the Clock (Overhead 3)
- ★ overhead pens in 2 different colors
- ★ Student Book, page 3
- ★ crayons and pencils

Review one of the clocks on the overhead you used last week. With children's guidance, fill in the ten-strips to match the number of minutes. Hand out the student worksheets or have children find page 3 in their Student Books. Ask youngsters to look carefully at each clock on the page. How many minutes have passed on each? Ask them to color in the ten-strips below each clock to match the number of minutes indicated by the long hand.

Be sure to circulate and nestle in to help where needed.

NAME \_\_\_\_\_ DATE \_\_\_\_\_

### Counting by 5's on the Clock

**A**

How many minutes past?


**B**

How many minutes past?


**C**

How many minutes past?


Student Book

# Challenge 18



## EXPLORING TIME

### Looking at Hours, Half Hours & Minutes

#### Overhead

Today, children review telling time to the hour and the half hour on their student clocks. Then the group practices counting by 5's on a set of overhead clock faces.

#### You'll need

- ★ Counting by 5's on the Clock (Overhead NC 3)
- ★ overhead pens
- ★ the student clocks

#### Skills

- ★ telling time to the hour and half hour
- ★ counting by 5's

Hand out the student clocks and have children practice telling time to the hour and to the half hour. Guide students as they move the minute hand around their clocks and count by 5's with you.

Then gather the children around the screen. Display the Counting by 5's overhead. What number is the long hand pointing to on the first clock? How many minutes has the minute hand traveled around the clock?

**Counting by 5's on the Clock**

How Many Minutes Past?


How Many Minutes Past?


How Many Minutes Past?


Overhead 3

Explain that you want to fill in the 5's (and 10's) on the ten-strips to match the number of minutes past the hour on the first clock. Ask for input: how

**Challenge 18** (cont.)

many 5's will you need to color? How many minutes is that?

Ask children to help you fill in the sets of ten-strips below the other two clocks. How many 5's have gone by on each? How many minutes is that?

# Challenge 19



## EXPLORING TIME

### Looking at 5's on the Clock A Worksheet

**Overview**

Children color in various 5-minute intervals on a set of clock faces.

**You'll need**

- ★ Student Book, page 4
- ★ pencils and crayons

**Skills**

- ★ counting 5-minute intervals on a clock



Distribute Student Book, page 4. Ask children to get a pencil and a crayon. Have them write their names on their work-sheet. Explain to the children that they're going to color in the number of minutes indicated in the caption beneath each clock on the page. Tell them they need to start coloring at the 12 each time. Then do the first exercise together so that everyone understands the task. Send them out to complete the worksheet. You might want to point out where the minute hand on your class-room clock will be when children need to be finished with this task.

NAME \_\_\_\_\_ DATE \_\_\_\_\_

**Looking at 5's on the Clock**

 Color 10 minutes	 Color 25 minutes	 Color 15 minutes
 Color 30 minutes	 Color 45 minutes	 Color 60 minutes

Student Book

## Challenge 20



### EXPLORING TIME

## Clocks Quarter Past, Half Past & Quarter 'Til

### Overview

In this activity the teacher introduces a set of 3 cards designed to give a general picture of what clocks look like at quarter after, half past, and quarter 'til the hour. After a bit of discussion, hand out another set of 6 cards, each of which shows a clock set to quarter after, half past, or quarter 'til a particular hour. Children match the clock face and fraction cards in the pocket chart and then practice setting their student clocks to some of the times pictured on the cards.



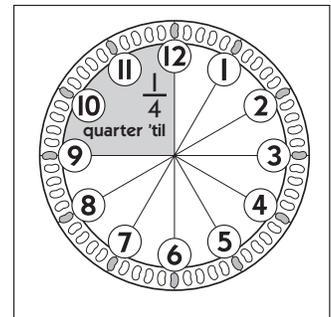
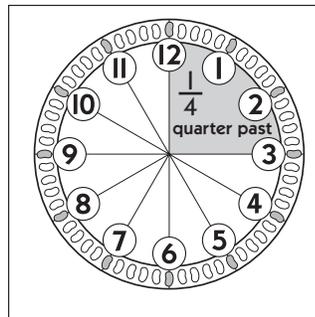
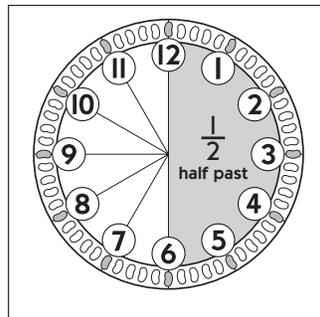
### You'll need

- ★ Clock Fraction cards
- ★ Quarter Hour Clocks
- ★ pocket chart
- ★ student clocks

### Skills

- ★ seeing and discussing halves and fourths on a clock
- ★ telling time to the quarter and half hour
- ★ matching clock faces and clock fraction cards

Begin the lesson by holding up the three clock fraction cards one at a time. Ask students what they notice and help them read the fractions and the words on each card. Post the cards in the top row of the pocket chart.



Then hand out the remaining clock face cards. Ask children to help each other identify the clock cards that show quarter past, half past, and quarter 'til and place them in the pocket chart under the appropriate clock fraction cards.

**Challenge 20** (cont.)


After the clocks are all displayed take a moment to point out where the minute and hour hands are on each. Then distribute the student clocks and ask children to try setting their clocks to match several of the clock cards. Where does the minute hand belong each time? What about the hour hand?

## Challenge 2I



### EXPLORING TIME

## Quarter Past, Half Past, Quarter 'Til A Match Game

### Overview

The teacher guides children in setting their paper clocks to various times. Then students use the clock face cards from last session along with a set of number and word labels to play a matching game.



### You'll need

- ★ student clocks
- ★ Quarter Hour Clocks
- ★ Quarter Hour time cards
- ★ pocket chart
- ★ your key ring

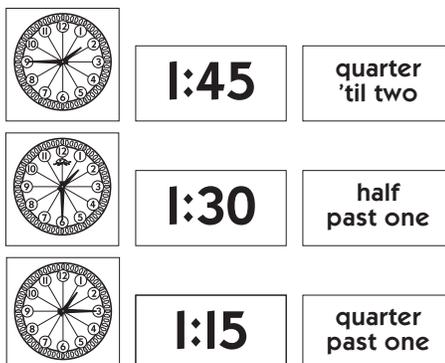
### Skills

- ★ telling time to the quarter and half hour
- ★ matching quarter hour clock faces to quarter hour time cards

Begin the lesson by handing out student clocks. Take a few minutes to guide students in setting the hands on their clocks to show the following times:

- quarter past one
- half past one
- quarter 'til two
- quarter past two
- half past two
- quarter 'til three

Put away the student clocks and hand out the Quarter Hour Clocks and the Quarter Hour time cards. Ask children to help one another get the clock face cards and the two matching labels, one has the time in numbers and the other label has the time in words, into threesomes. Jingle your keys until the matches have been found. Then, have children stand, three at a time, to display their matching cards. Does everyone agree that each of the cards belong together? Post the cards in the pocket chart in groups of three.



# Challenge 22



## EXPLORING TIME

### Quarter Past, Half Past, Quarter 'Til A Worksheet

#### Overview

Children practice telling time to the quarter hour on a worksheet.



#### You'll need

- ★ student clocks
- ★ Student Book, page 5
- ★ pencils, scissors, glue

#### Skills

- ★ telling time to the quarter and half hour
- ★ matching time labels to clock faces



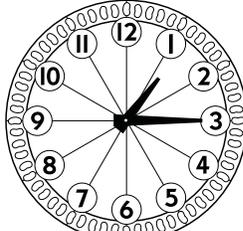
Use the student clocks to do a quick review of quarter past, half past, and quarter 'til. Hand out page 5 from the Student Book. Ask students to cut out the clock labels at the bottom of the page and glue them below the appropriate clocks. Encourage them to help one another.

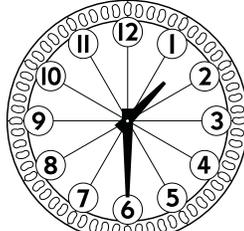
Student Book

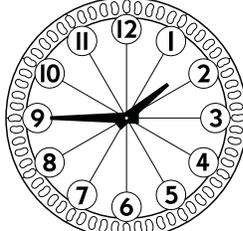
NAME \_\_\_\_\_ DATE \_\_\_\_\_

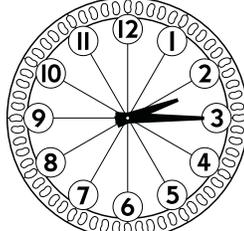
### Clocks & Labels

Cut out the clock labels at the bottom of the page. Glue the correct label into the box under each clock.











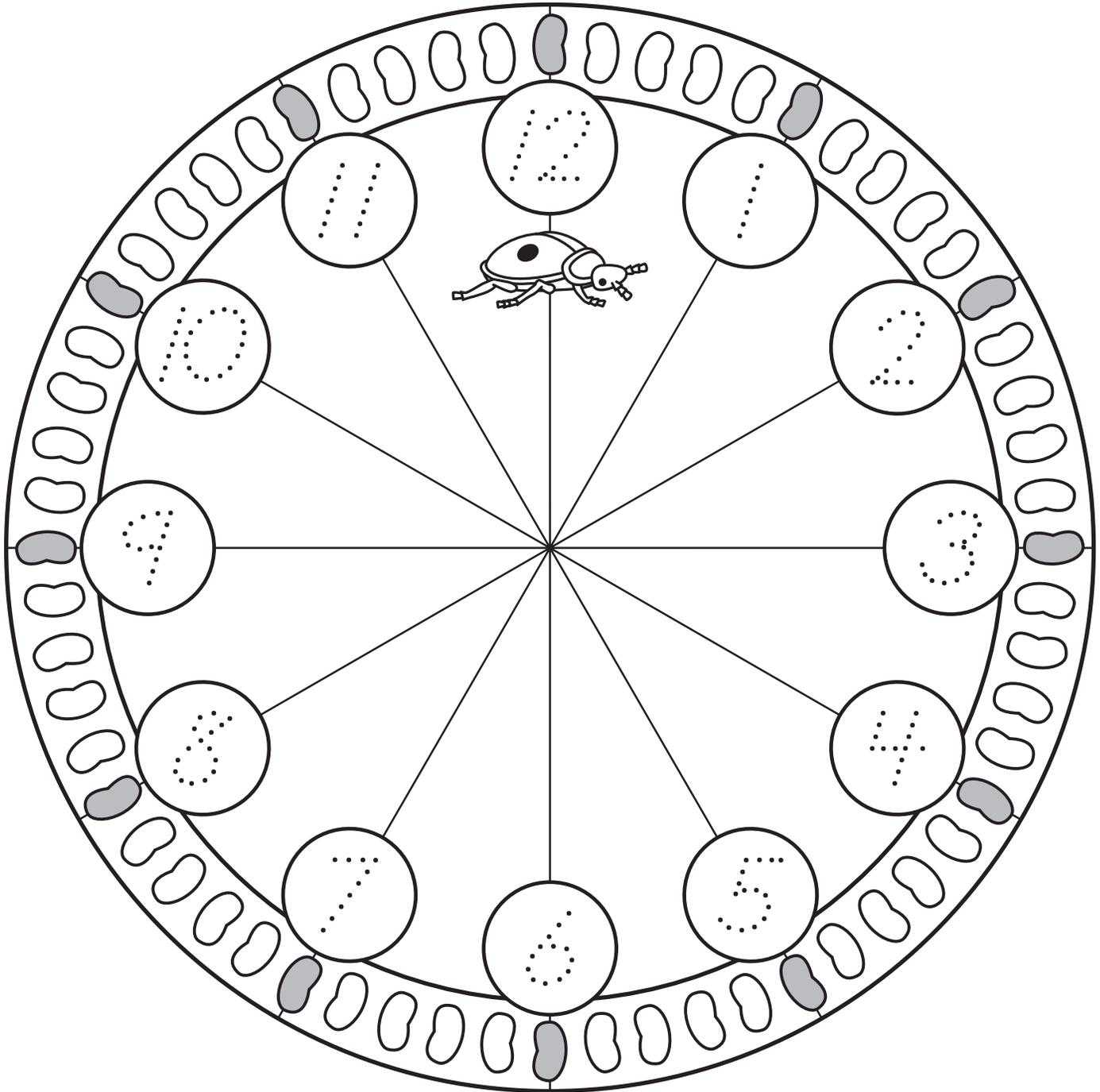
1:45 quarter 'til two	1:15 quarter past one
2:15 quarter past two	1:30 half past one







# Student Clock



## Number Cards, 1-6

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

1

2

3

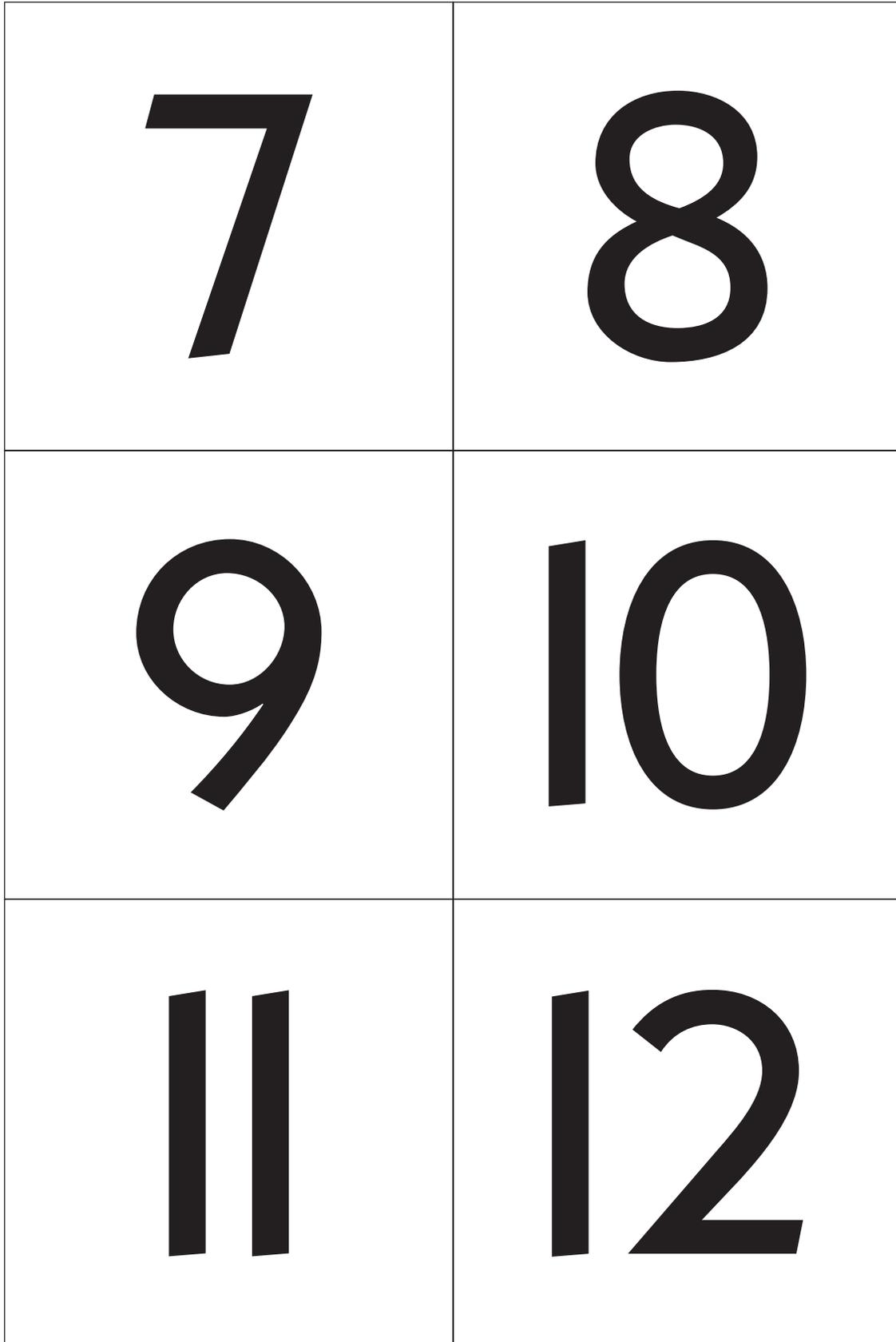
4

5

6

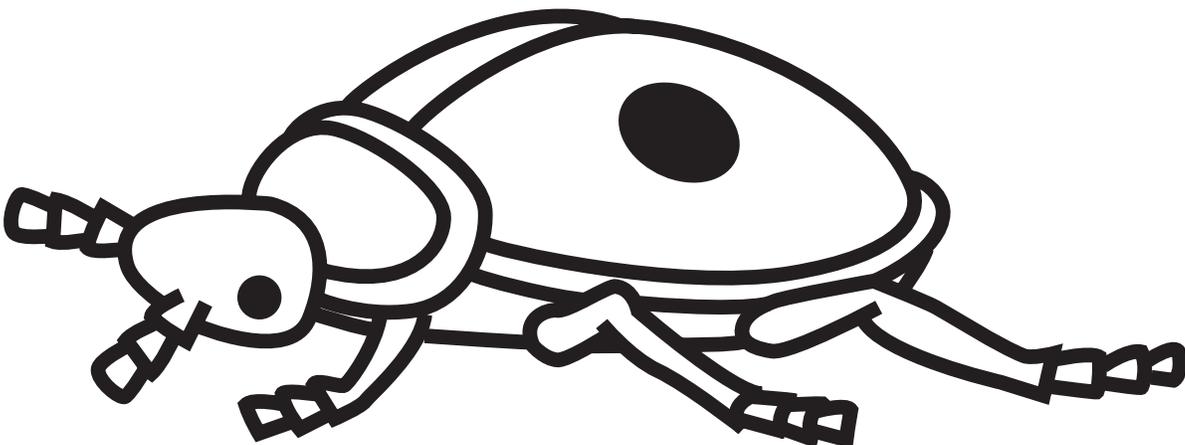
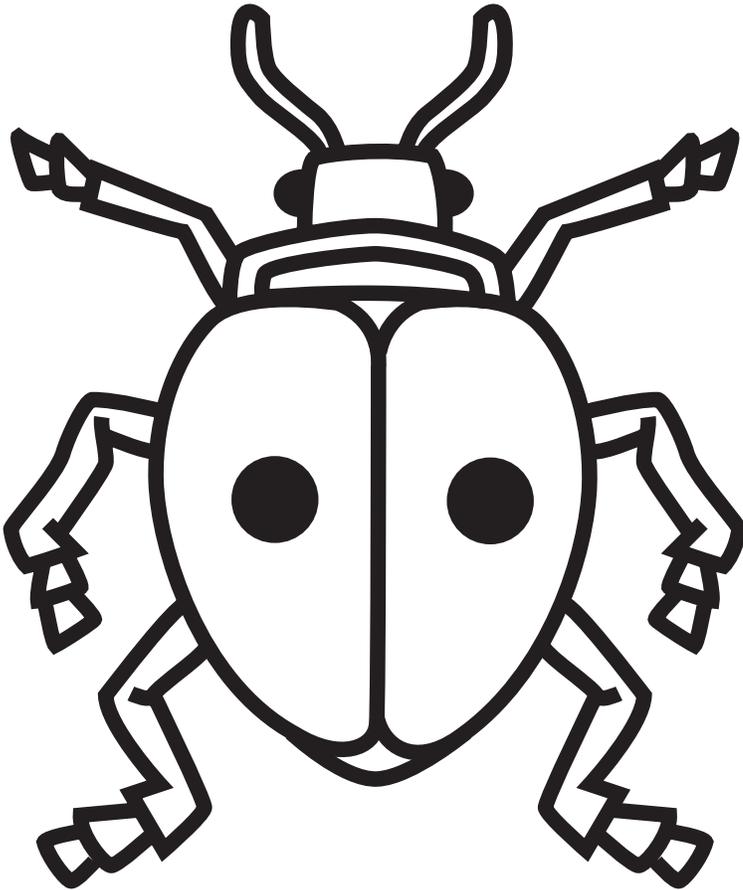
## Number Cards, 7-12

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



# Ladybug

Run a copy of this sheet on red paper and cut out the bug you prefer to use.



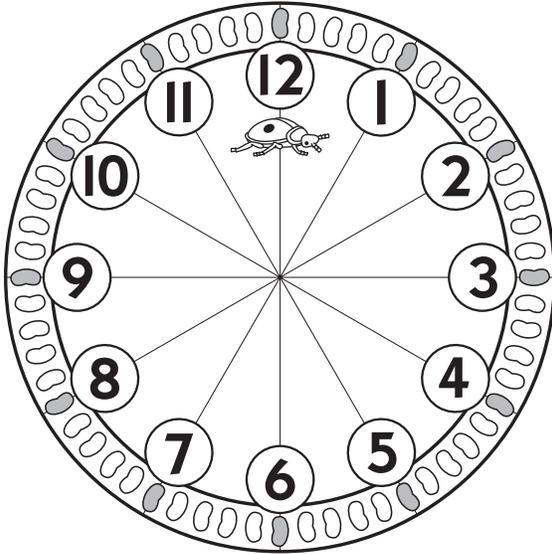




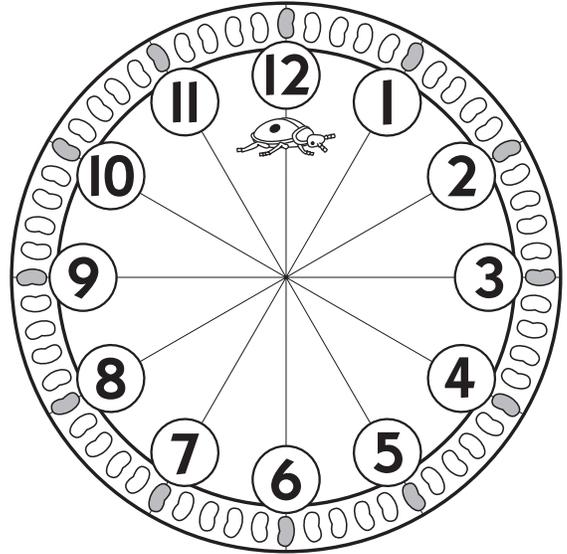
# Tell the Time



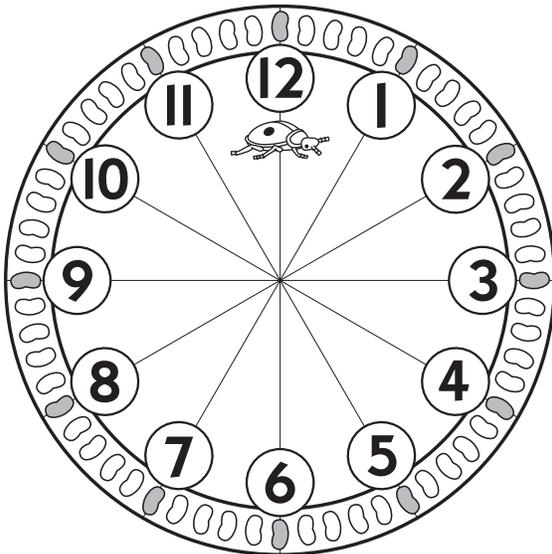
Draw a long hand pointing to the 12. Draw a short hand pointing to one of the other numbers. Tell the time.



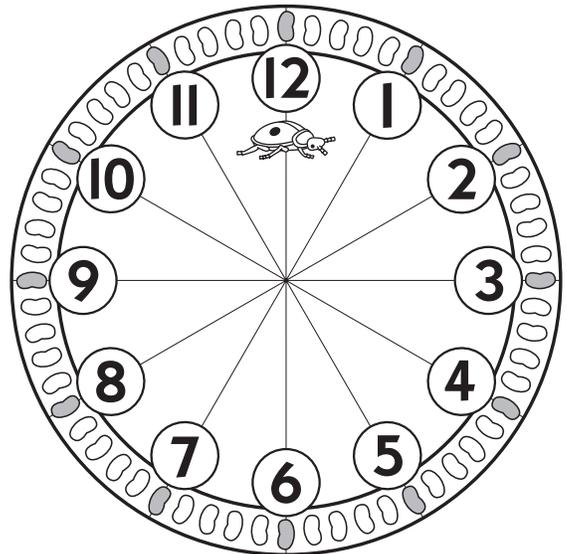

**o'clock**




**o'clock**

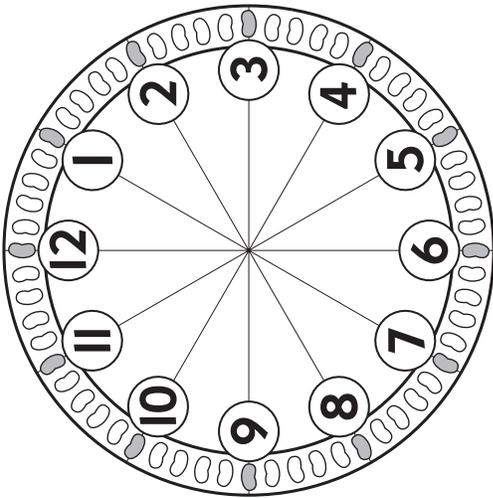



**o'clock**




**o'clock**

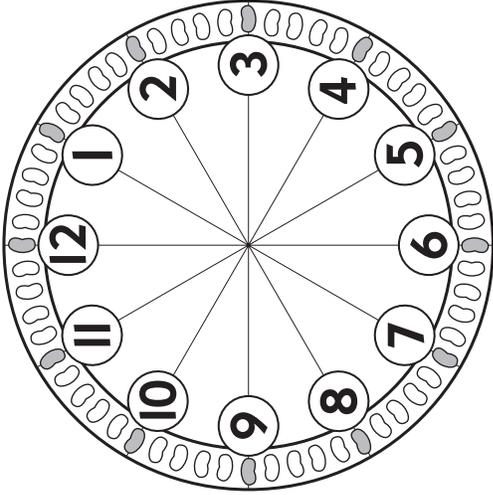
# An Hour or Bust! record sheet



Teacher's Score

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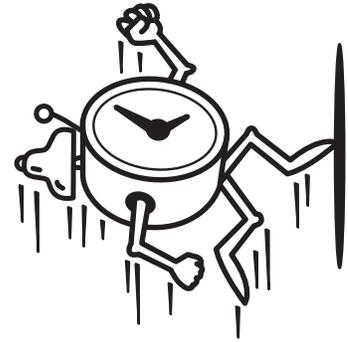
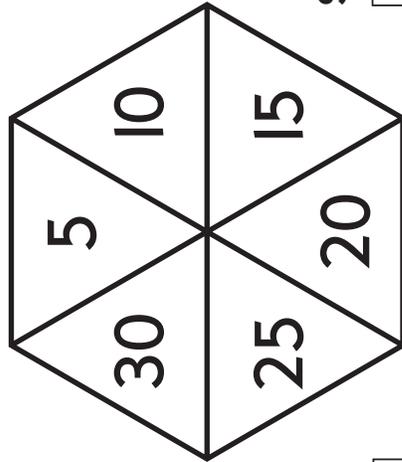
Or Bust!

Student's Score

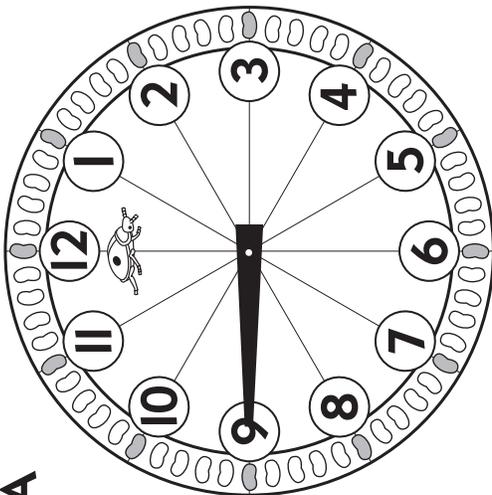
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Or Bust!

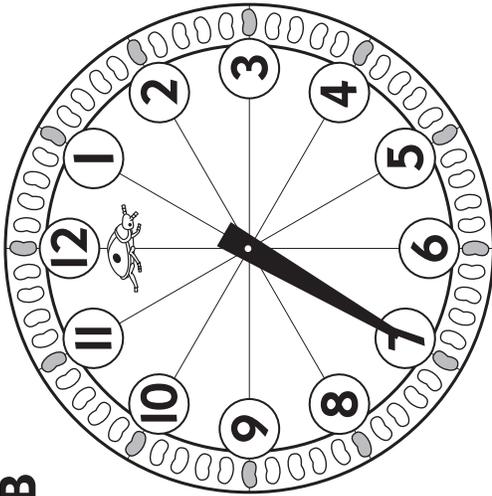
# Counting by Fives on the Clock

**A**



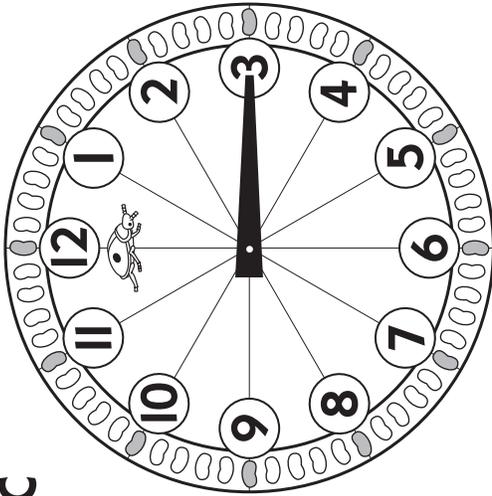
How many minutes past?


**B**



How many minutes past?


**C**



How many minutes past?



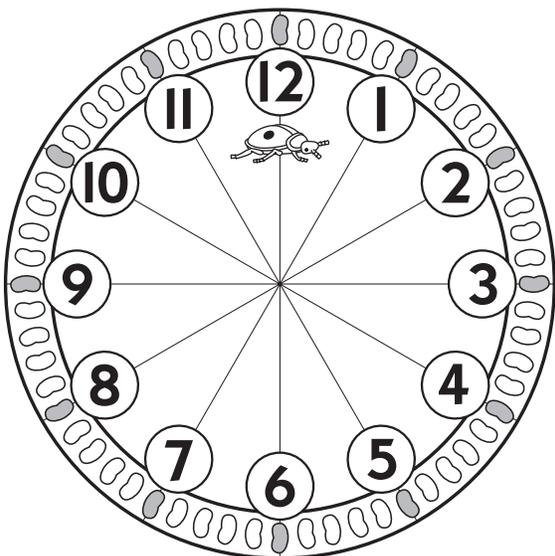




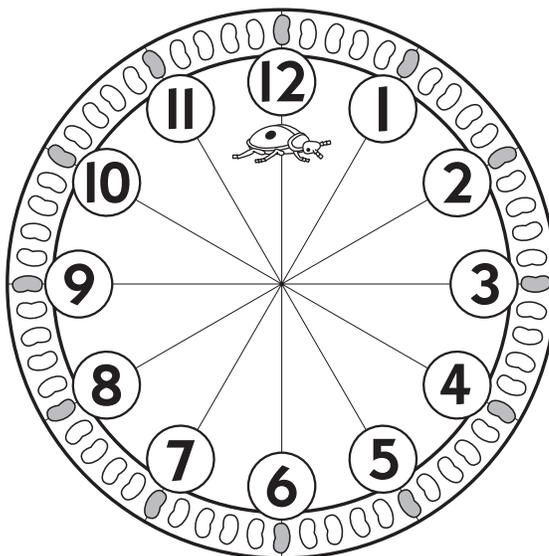

# Tell the Time



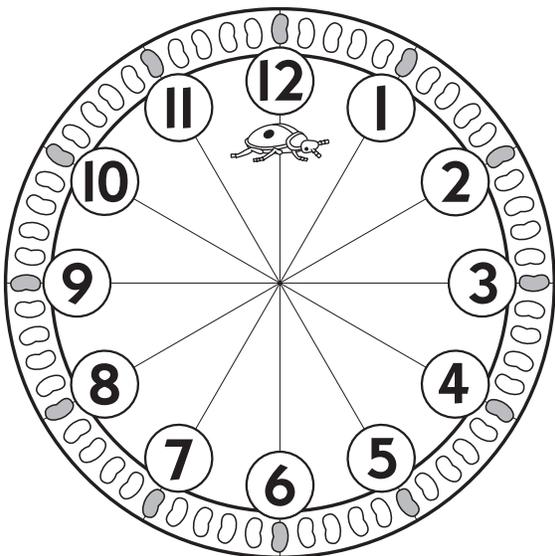
Draw a long hand pointing to the 12. Draw a short hand pointing to one of the other numbers. Tell the time.



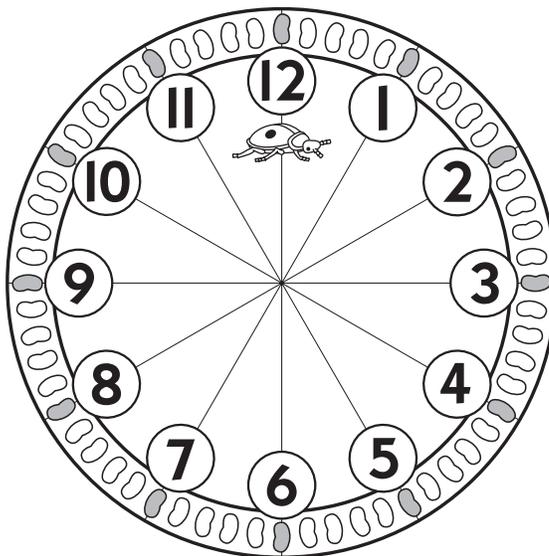

**o'clock**




**o'clock**




**o'clock**



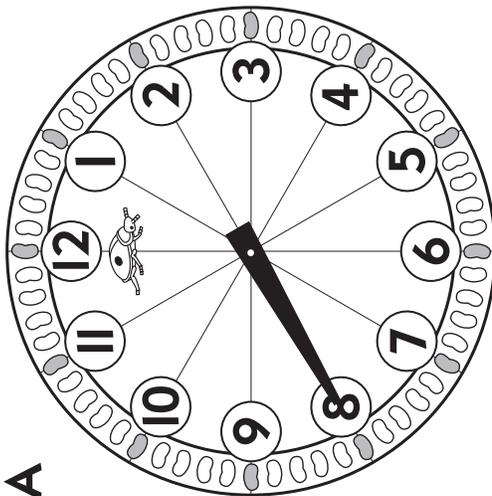

**o'clock**



NAME \_\_\_\_\_ DATE \_\_\_\_\_

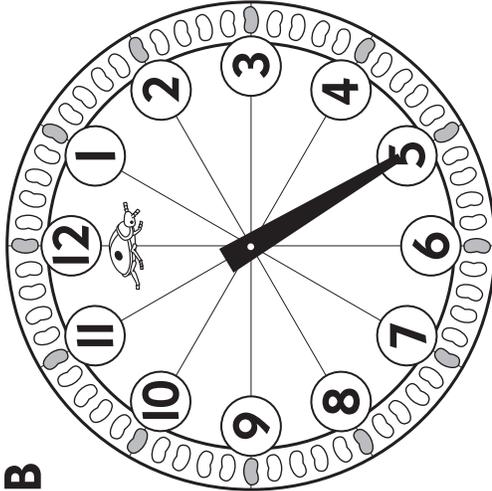
# Counting by 5's on the Clock

**A**



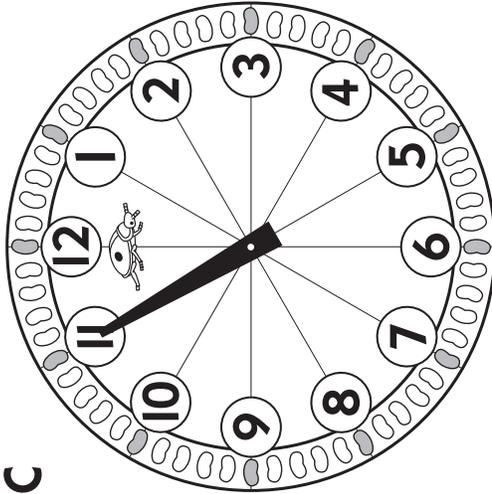
How many minutes past?


**B**



How many minutes past?

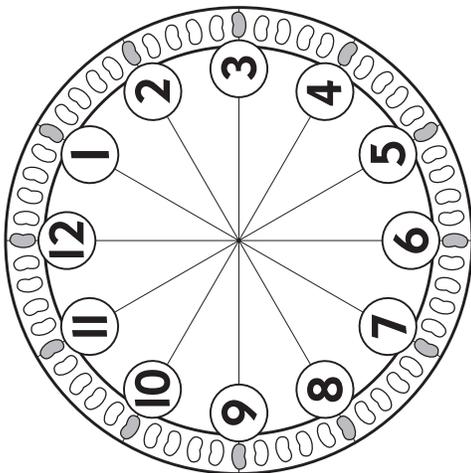

**C**



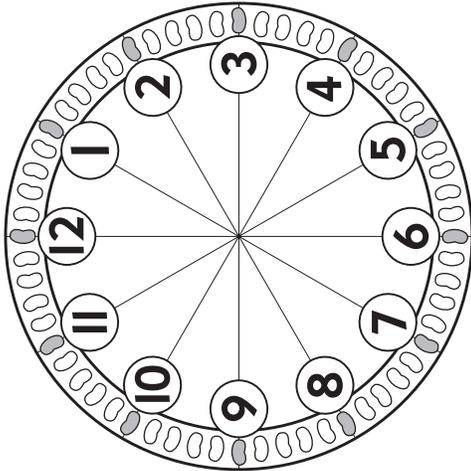
How many minutes past?


NAME \_\_\_\_\_ DATE \_\_\_\_\_

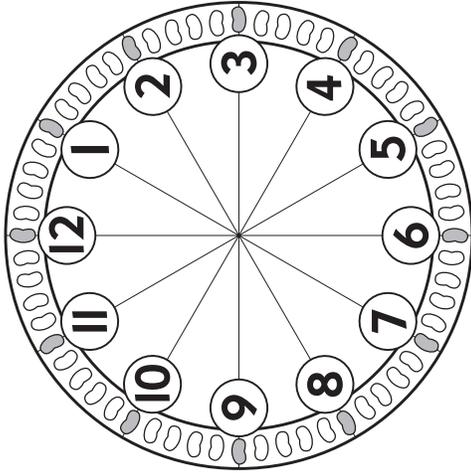
# Looking at 5's on the Clock



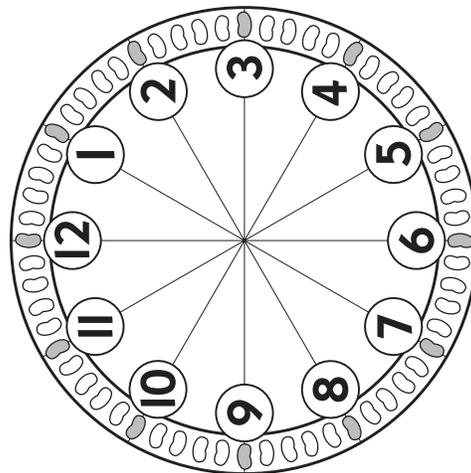
Color 10 minutes



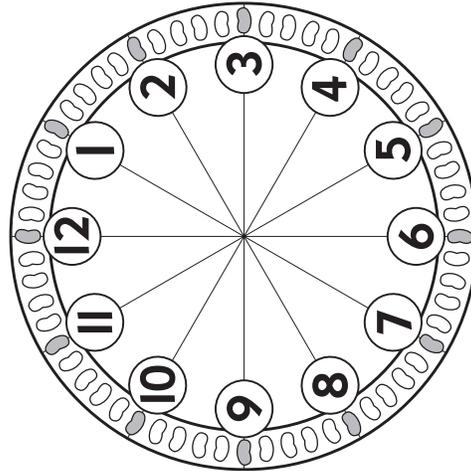
Color 25 minutes



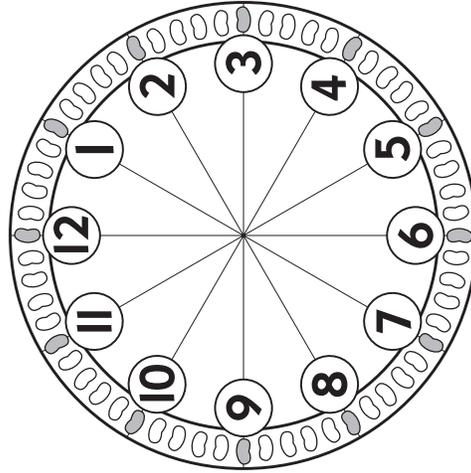
Color 15 minutes



Color 30 minutes



Color 45 minutes

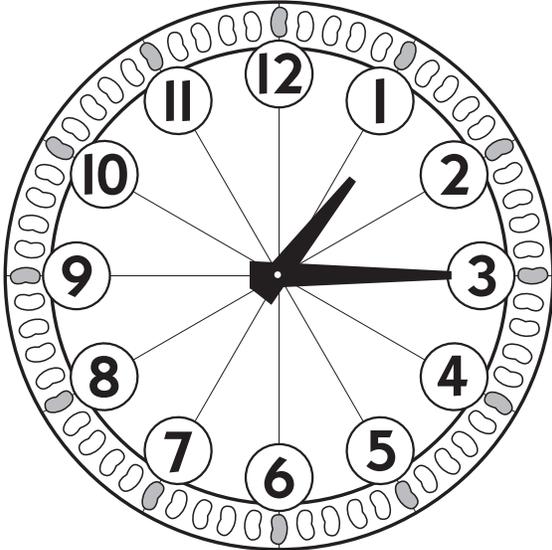


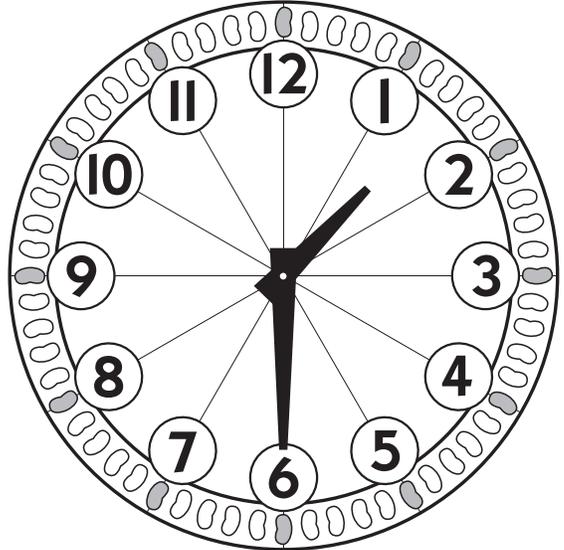
Color 60 minutes

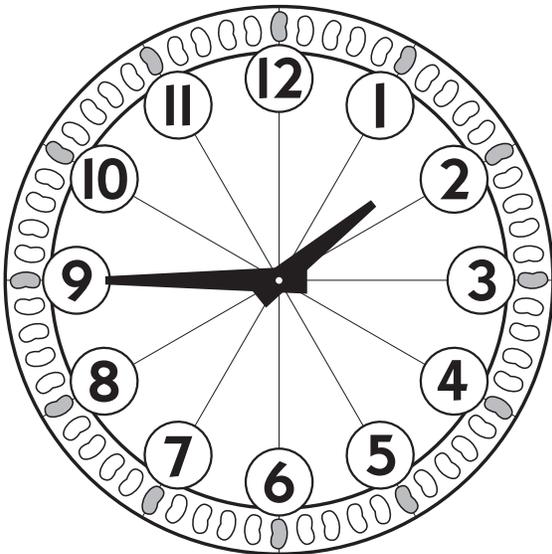
# Clocks & Labels

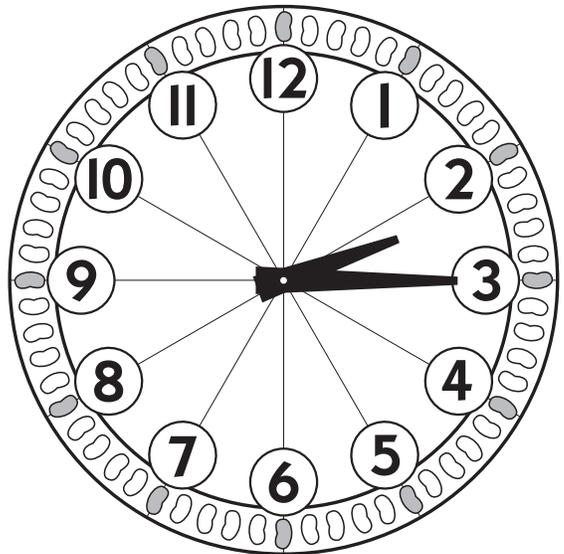


Cut out the clock labels at the bottom of the page. Glue the correct label into the box under each clock.









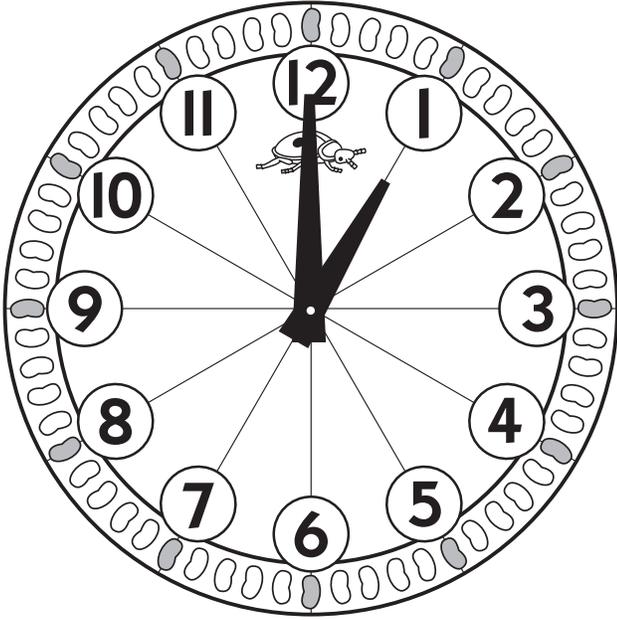


1:45 quarter 'til two	1:15 quarter past one
2:15 quarter past two	1:30 half past one

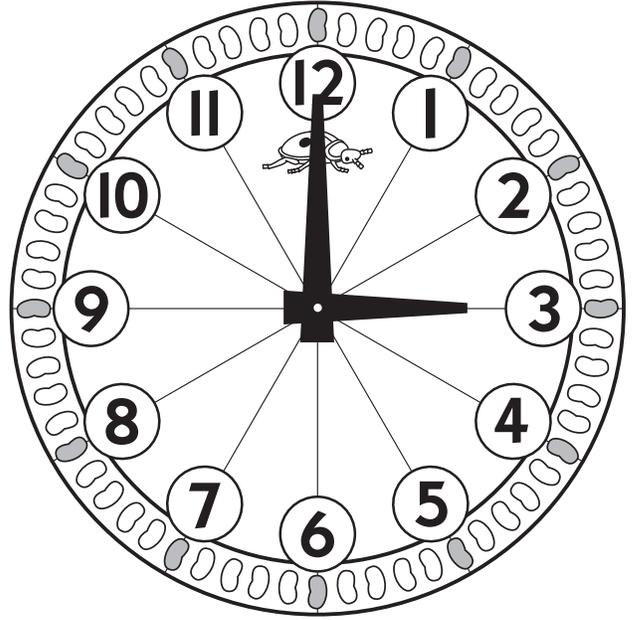




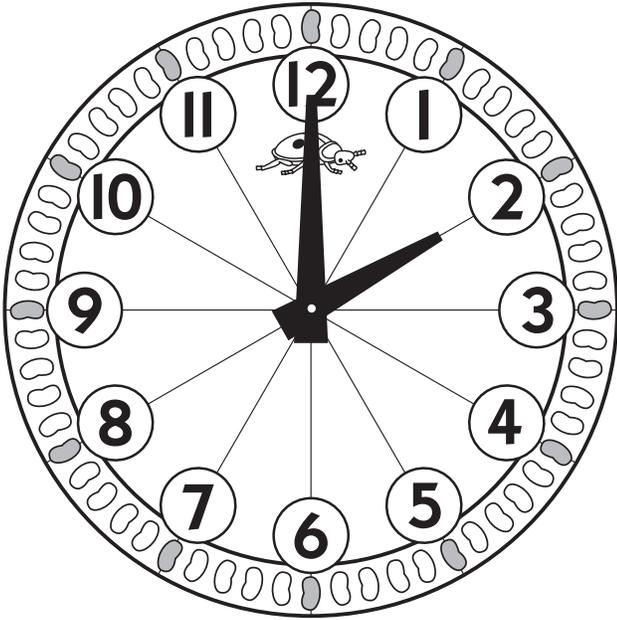




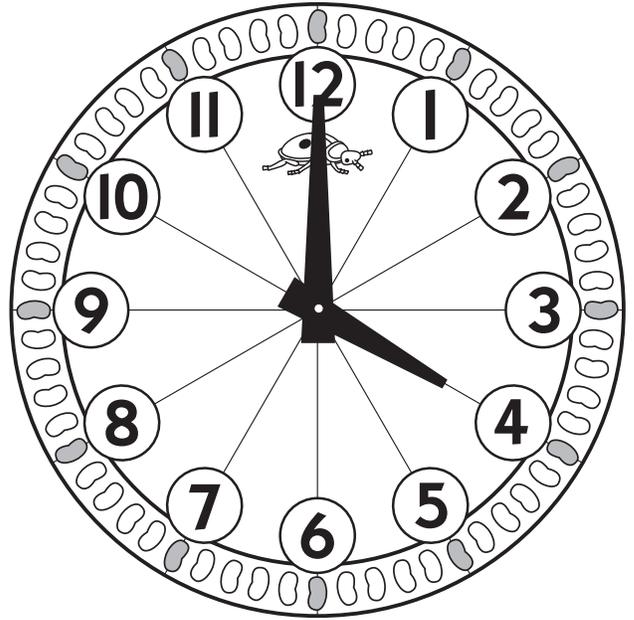
Hour Clocks



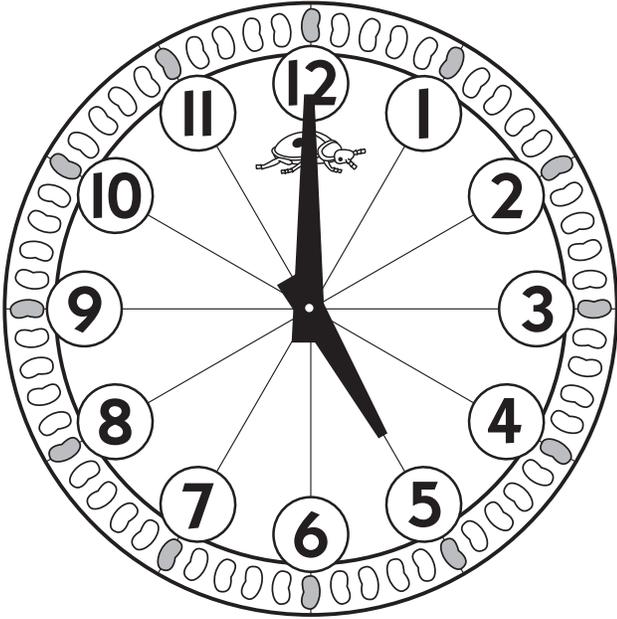
Hour Clocks



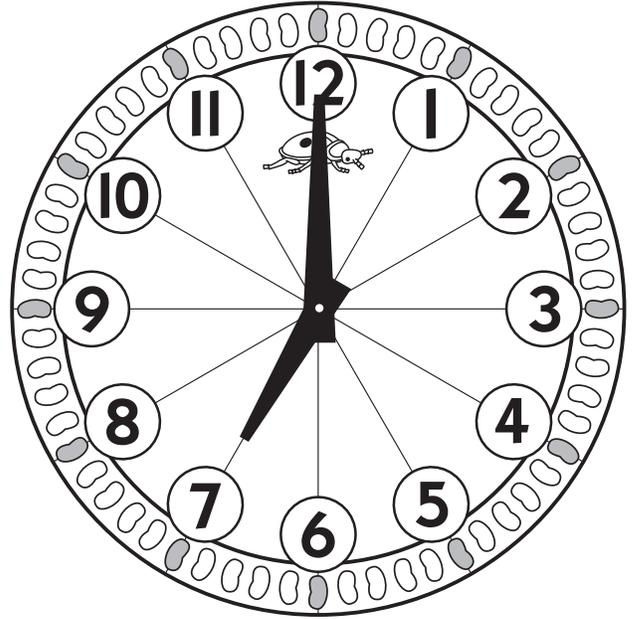
Hour Clocks



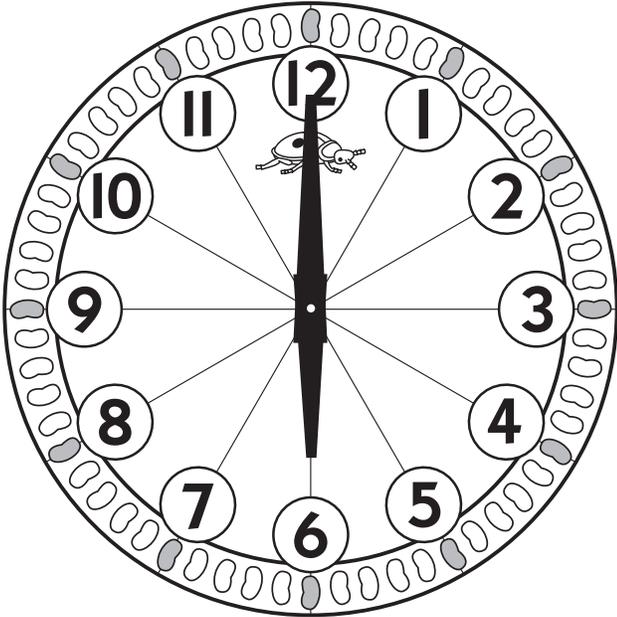
Hour Clocks



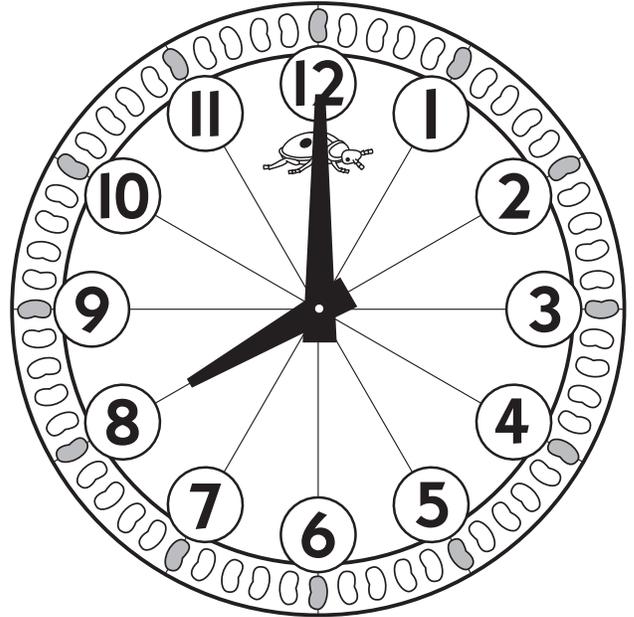
Hour Clocks



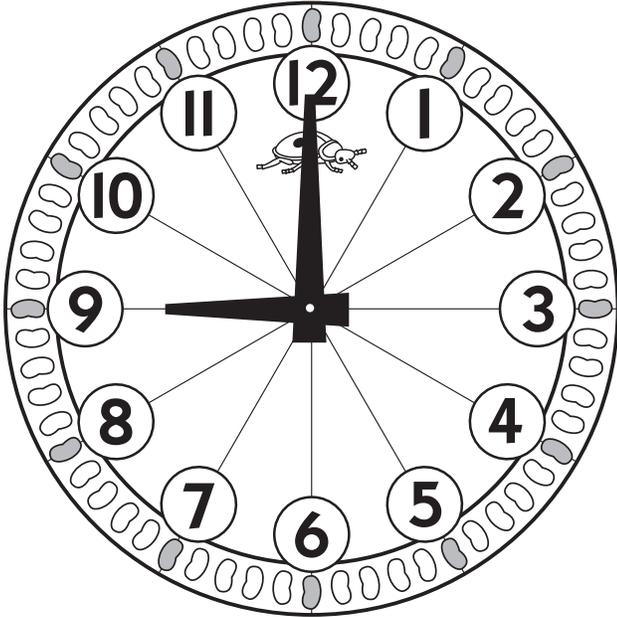
Hour Clocks



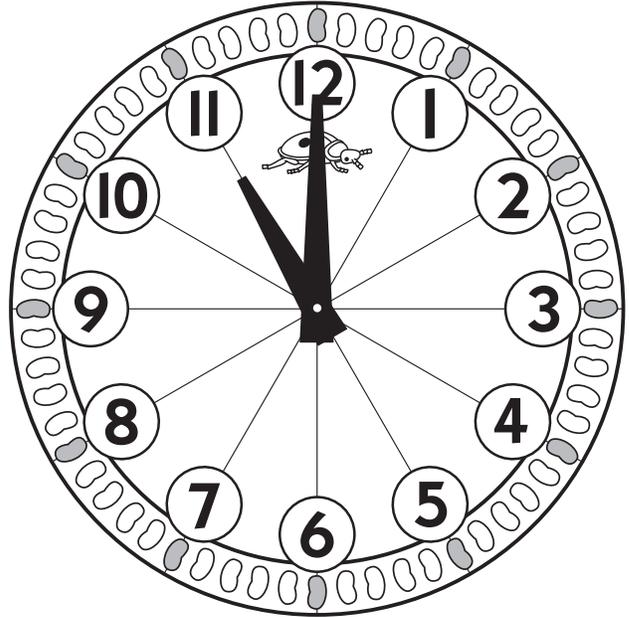
Hour Clocks



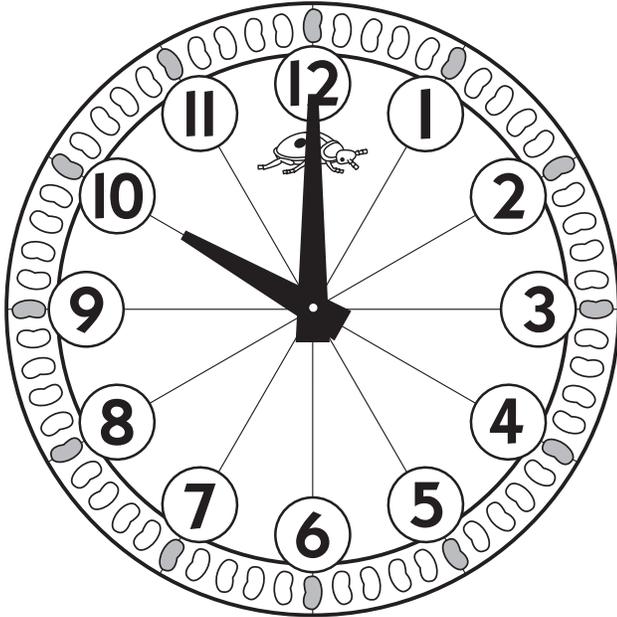
Hour Clocks



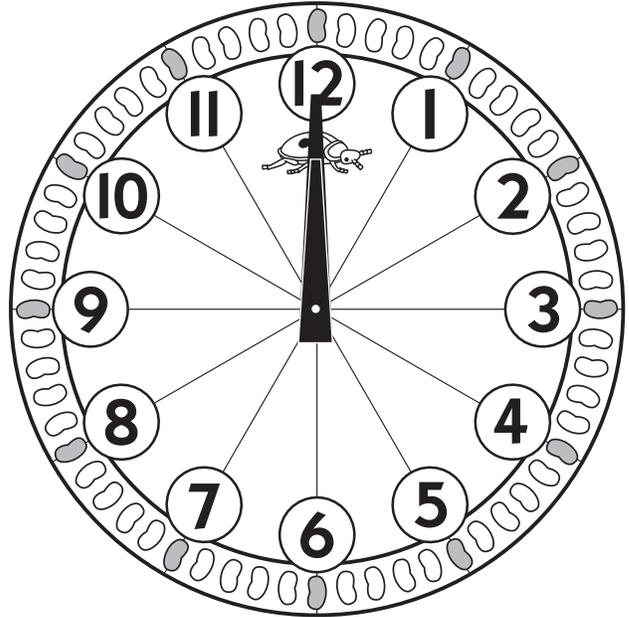
Hour Clocks



Hour Clocks



Hour Clocks



Hour Clocks

1:00

one o'clock

■ Hour Time Cards

2:00

two o'clock

■ Hour Time Cards

3:00

three o'clock

■ Hour Time Cards

4:00

four o'clock

■ Hour Time Cards

5:00

five o'clock

■ Hour Time Cards

6:00

six o'clock

■ Hour Time Cards

7:00  
seven o'clock

Hour Time Cards

8:00  
eight o'clock

Hour Time Cards

9:00  
nine o'clock

Hour Time Cards

10:00  
ten o'clock

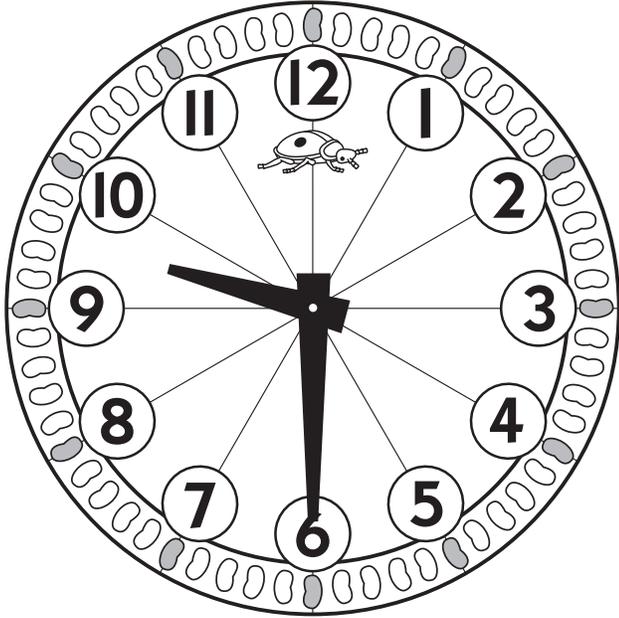
Hour Time Cards

11:00  
eleven o'clock

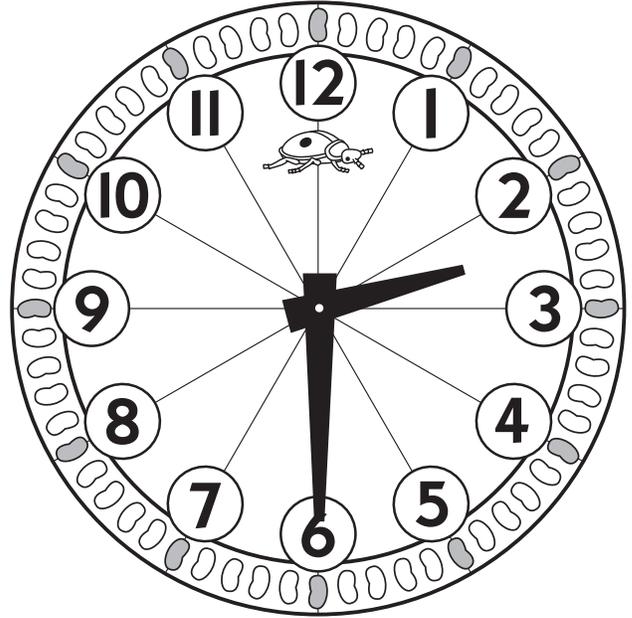
Hour Time Cards

12:00  
twelve o'clock

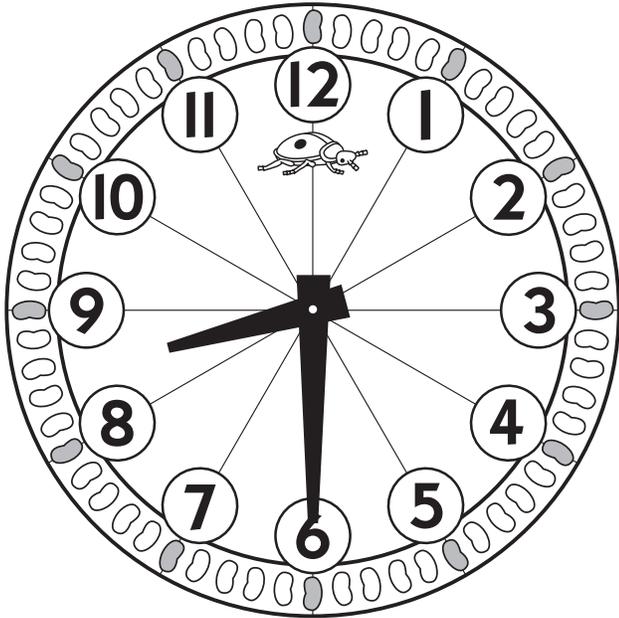
Hour Time Cards



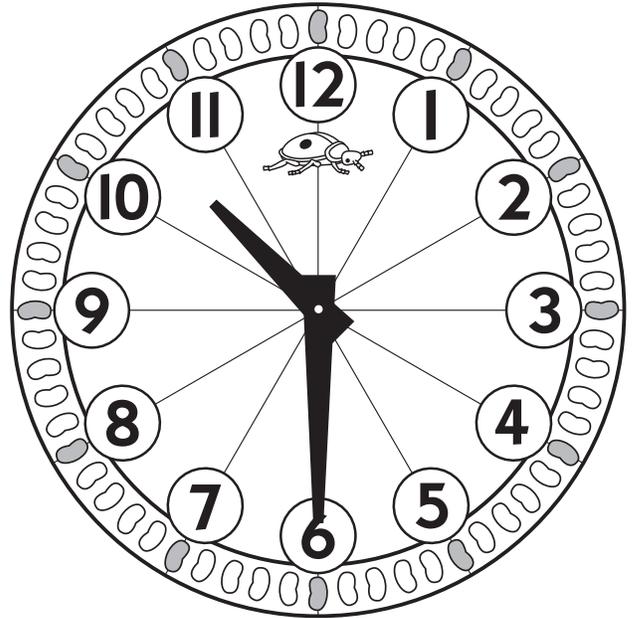
■ □ Half Hour Clocks



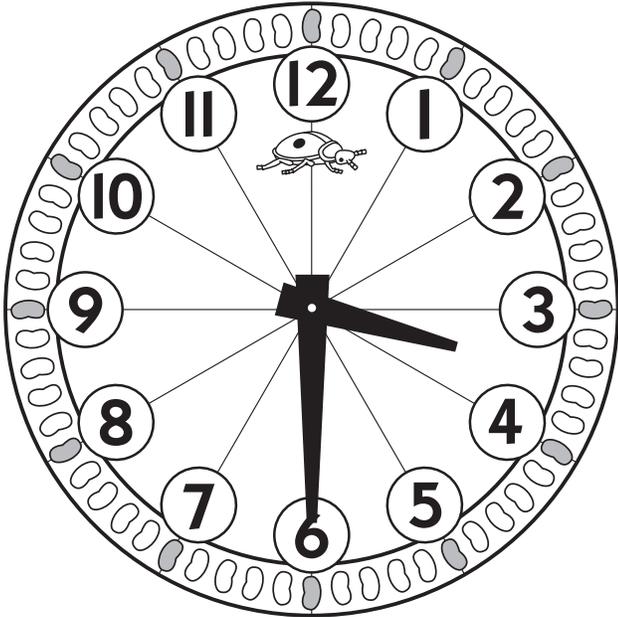
■ □ Half Hour Clocks



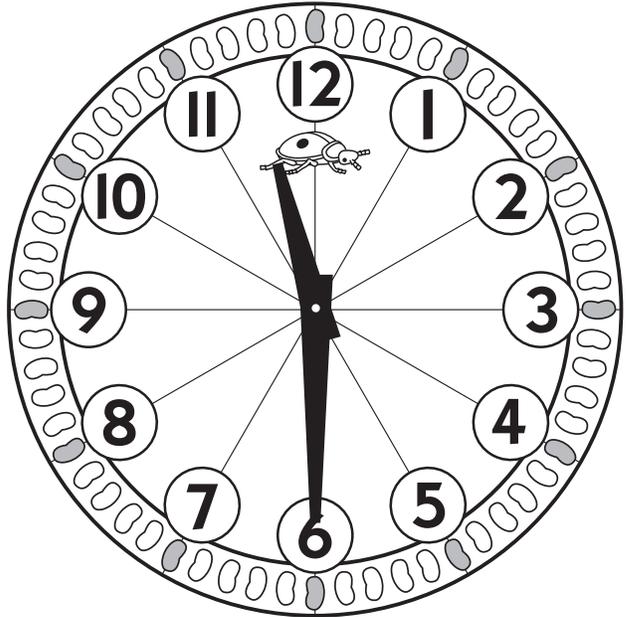
■ □ Half Hour Clocks



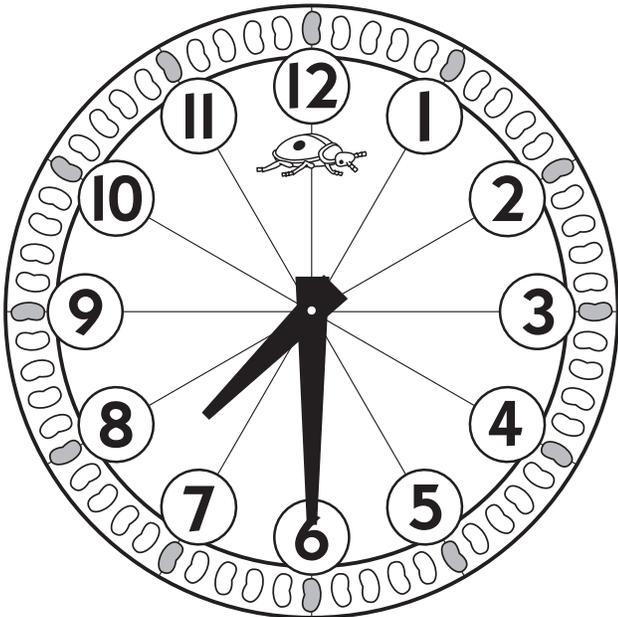
■ □ Half Hour Clocks



■ □ Half Hour Clocks



■ □ Half Hour Clocks



■ □ Half Hour Clocks

3:30

half past three

■  Half Hour Time Cards

11:30

half past eleven

■  Half Hour Time Cards

7:30

half past seven

■  Half Hour Time Cards

10:30

half past ten

■  Half Hour Time Cards

9:30

half past nine

■  Half Hour Time Cards

2:30

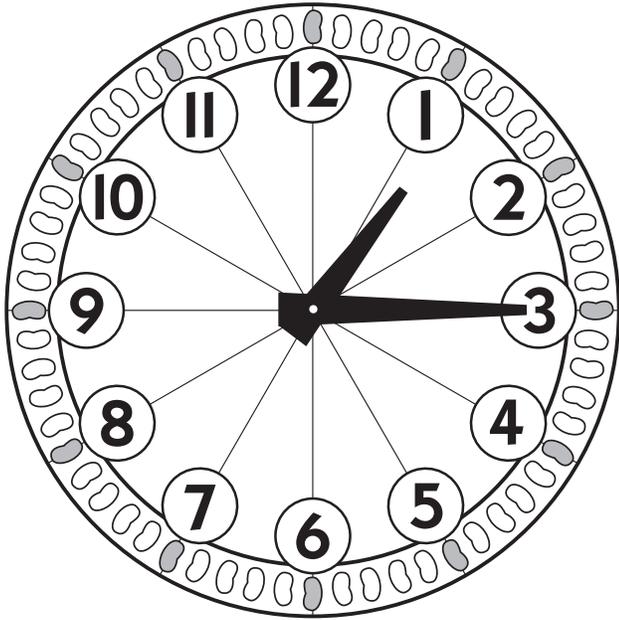
half past two

■  Half Hour Time Cards

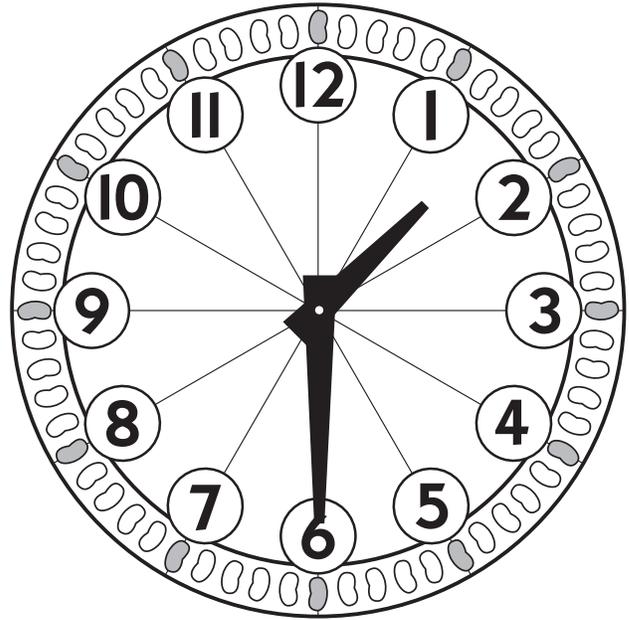
8:30

half past eight

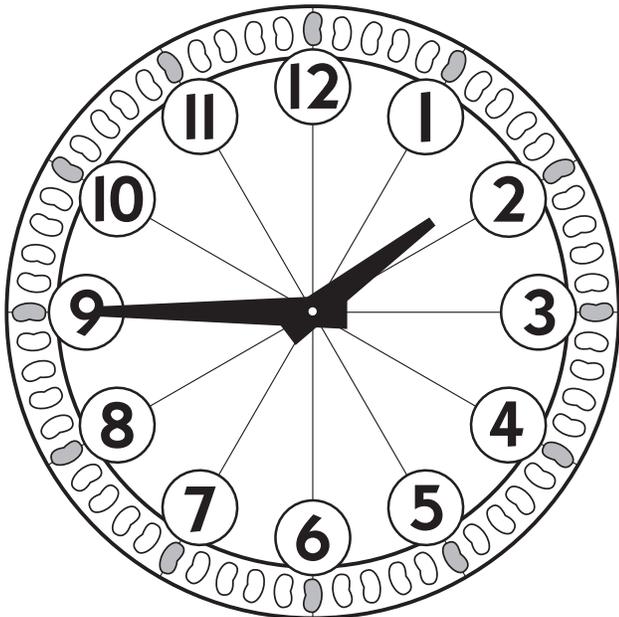
■ □ Half Hour Time Cards



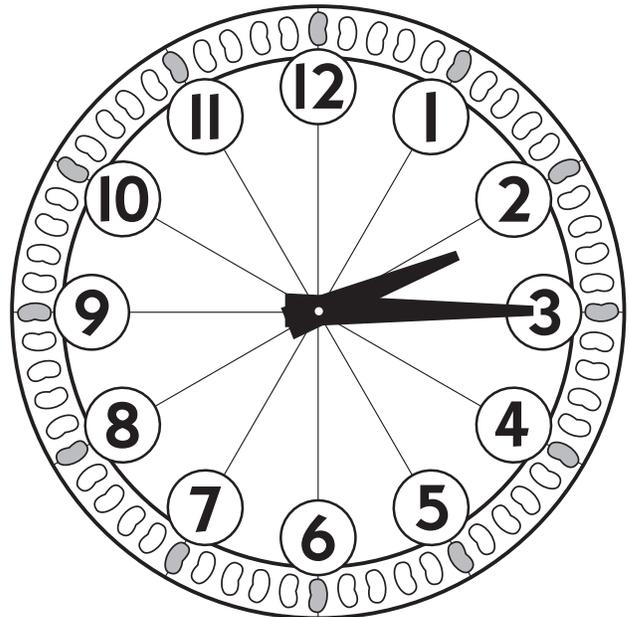
■ □ Quarter Hour Clocks



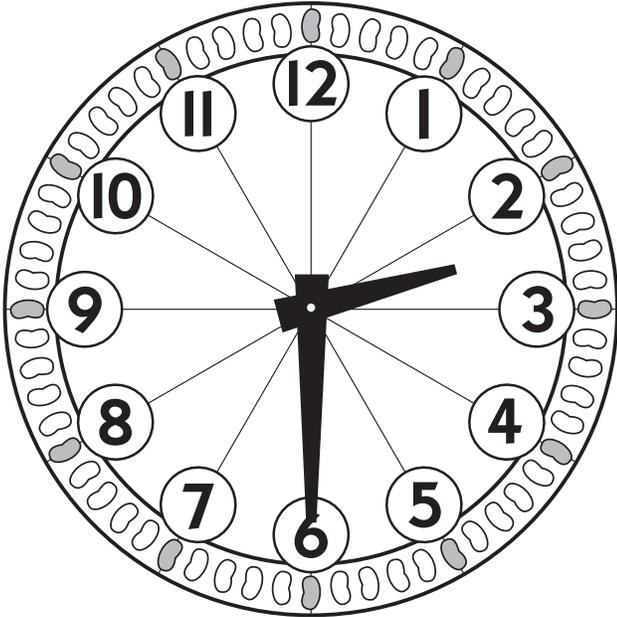
■ □ Quarter Hour Clocks



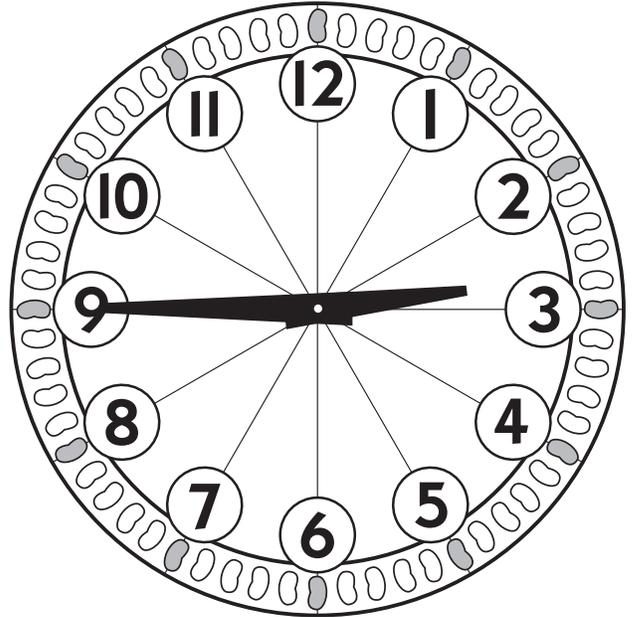
■ □ Quarter Hour Clocks



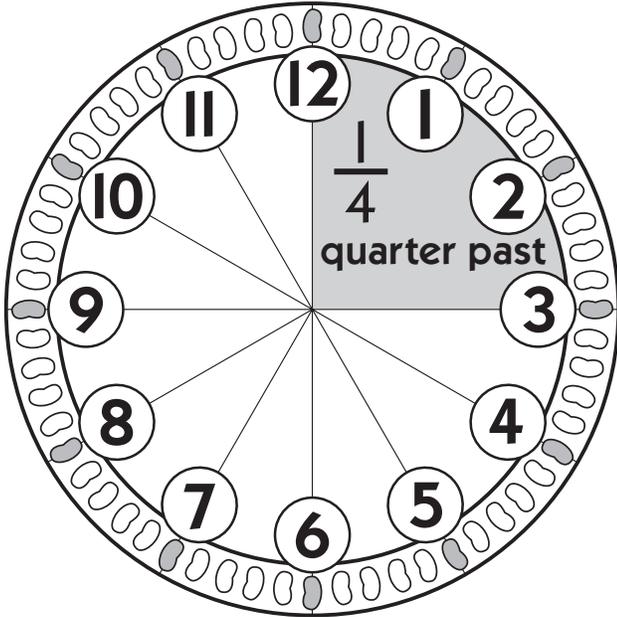
■ □ Quarter Hour Clocks



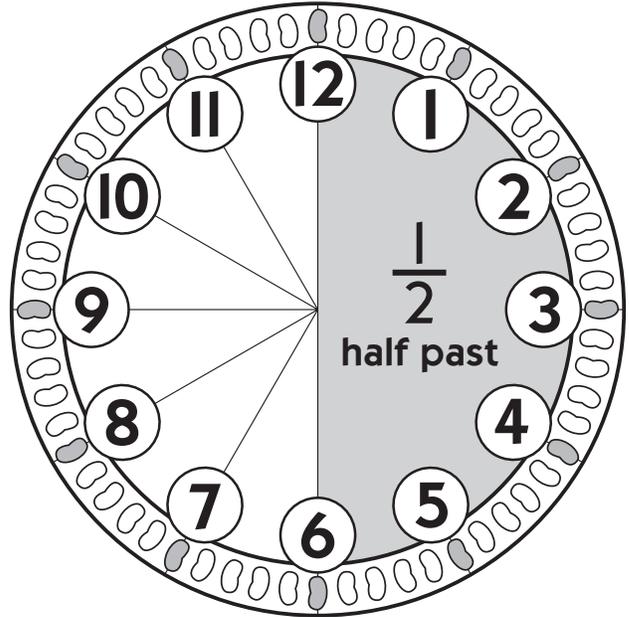
■ □ Quarter Hour Clocks



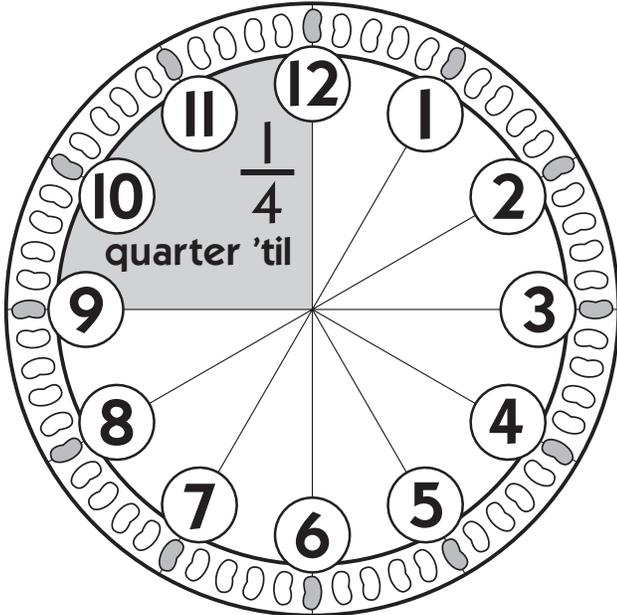
■ □ Quarter Hour Clocks



■ □ Clock Fractions



■ □ Clock Fractions



■ □ Clock Fractions

**quarter  
past one**

■  Quarter Hour Time Cards

**half  
past one**

■  Quarter Hour Time Cards

**quarter  
'til two**

■  Quarter Hour Time Cards

**quarter  
past two**

■  Quarter Hour Time Cards

**half  
past two**

■  Quarter Hour Time Cards

**quarter  
'til three**

■  Quarter Hour Time Cards

1:15

■ □ Quarter Hour Time Cards

1:30

■ □ Quarter Hour Time Cards

1:45

■ □ Quarter Hour Time Cards

2:15

■ □ Quarter Hour Time Cards

2:30

■ □ Quarter Hour Time Cards

2:45

■ □ Quarter Hour Time Cards