

Math Activities

The Heads In, Hearts In family enrichment program encourages families to use their minds (putting their “heads in”) as a tool to expand their knowledge around a variety of topic areas. By creating a shared educational experience, the family unit will work, grow and learn together, putting their “hearts in” to the process.

This unit contains the following:

- ▶ 3D Shapes
- ▶ Eggs-cellent Counting
- ▶ Guess Which Shape
- ▶ Gumball Equations
- ▶ Hungry Hedgehogs
- ▶ Marshmallow Structures
- ▶ Measure a Room
- ▶ Measurement Equivalents
- ▶ Measuring Liquids
- ▶ Photo-Graph
- ▶ Pie Die
- ▶ Skippy Clippy
- ▶ Spinner Math
- ▶ Stories Math
- ▶ Time: Before and After
- ▶ Twisting Place Values



MSU is an affirmative-action, equal-opportunity employer, committed to achieving excellence through a diverse workforce and inclusive culture that encourages all people to reach their full potential. Michigan State University Extension programs and materials are open to all without regard to race, color, national origin, gender, gender identity, religion, age, height, weight, disability, political beliefs, sexual orientation, marital status, family status or veteran status. Issued in furtherance of MSU Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Quentin Tyler, Interim Director, MSU Extension, East Lansing, MI 48824. This information is for educational purposes only. Reference to commercial products or trade names does not imply endorsement by MSU Extension or bias against those not mentioned. Produced by the MSU Extension Educational Materials Team (<http://msue.anr.msu.edu/>). 1P-05:2021-WEB-PA/LG WCAG 2.0



HEADS IN, HEARTS IN

Time: Before and After

Instructions for Set-Up

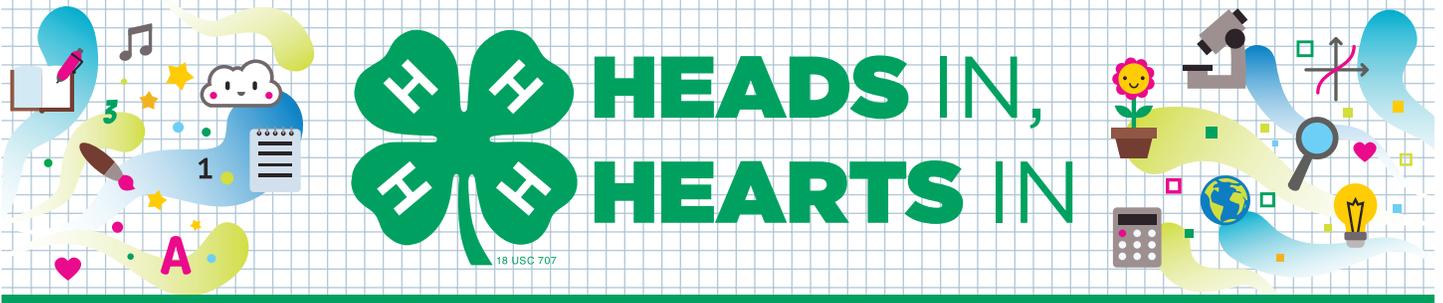


Supplies

- “Guide for Families” handout
- Clear plastic standup display (optional)
- “Before and After” handout (one per participant or family)
- “Clock” handout
- Scissors
- Dry-erase crayons or dry-erase markers
- Soft cloth to erase dry-erase crayon or dry-erase marker
- Display table

Activity Preparation

- ▶ Purchase or locate items on supply list.
- ▶ Print one copy of the “Guide for Families” handout. Laminate or place in a clear plastic standup display to allow participants to see it more readily.
- ▶ Print one copy of the “Before and After” handout per participant or family. Laminate or place in a clear sheet.
- ▶ Print at least one copy of the “Clock” handout on durable paper or laminate. Cut the clocks apart.
- ▶ Set up the display table and arrange needed supplies.



Time: Before and After

Guide for Families

Learning Objectives

What you need to know:

Telling time is an important skill to learn. It's also important to successfully identify periods of time before and after a set time. You'll be able to know if you're running late, have extra time or be right on time.

What you will do and learn:

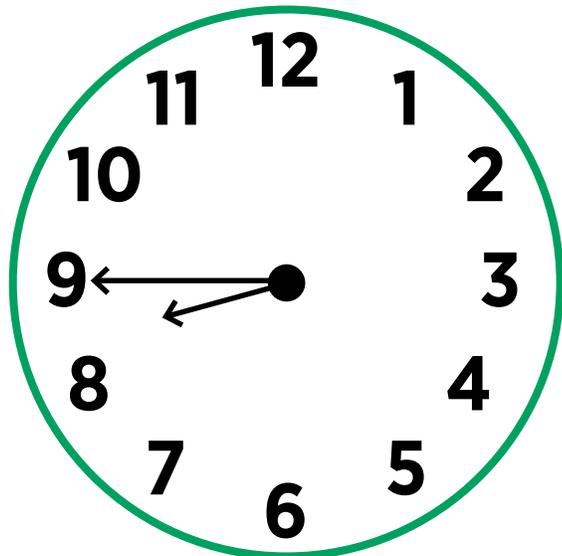
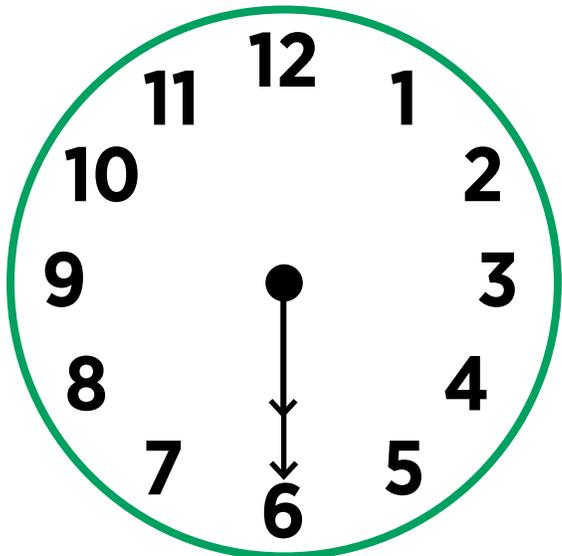
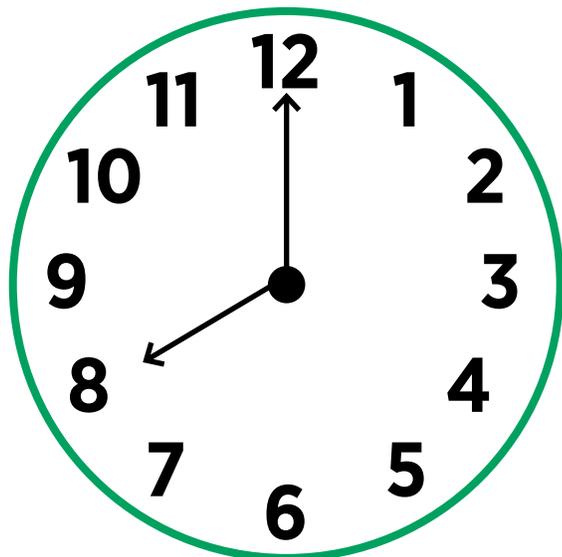
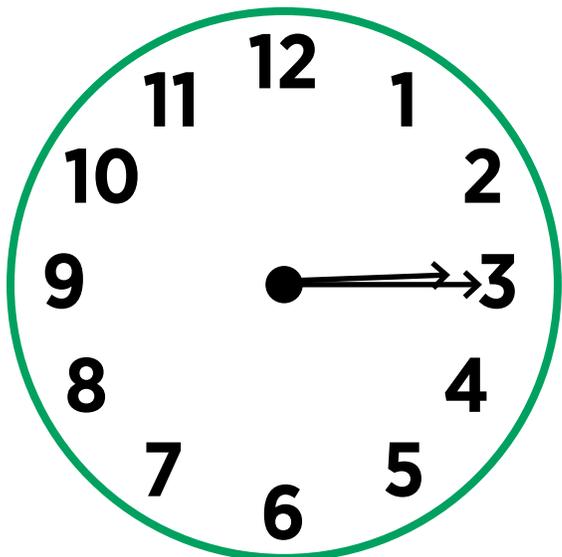
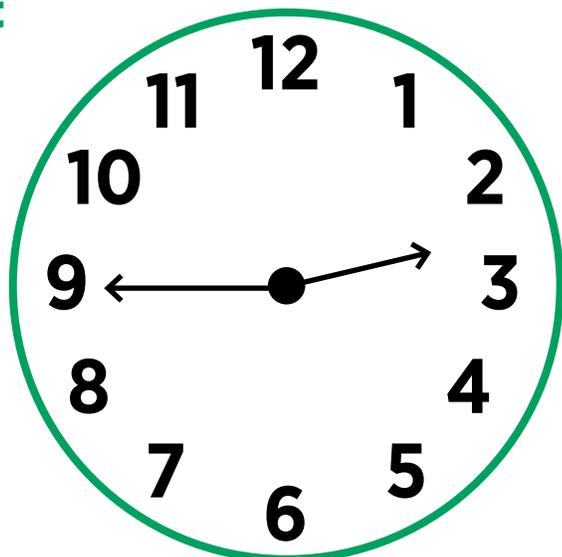
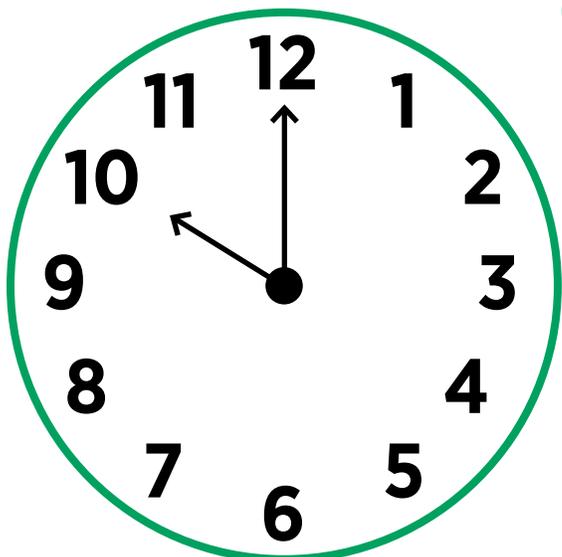
This activity will help you practice telling time. In this activity, you'll identify what time it is and then discover what time it is 15 minutes, 30 minutes, 45 minutes and 1 hour before and after that time.

Instructions

1. Take a "Before and After" handout.
2. Choose a clock from the table and place it in the center of the "Before and After" handout.
3. Using a dry-erase crayon or dry-erase marker, on the left, draw the time before the time on the clock. (The "Before and After" handout will tell you which amount of time to choose: 15 minutes, 30 minutes, 45 minutes or 1 hour.) Write the time below the clock such as 8:00.
4. Using a dry-erase crayon or dry-erase marker, on the right, draw the time after the time on the clock. (The "Before and After" handout will tell you which amount of time to choose: 15 minutes, 30 minutes, 45 minutes or 1 hour.) Write the time below the clock such as 9:00.
5. Erase your answer.
6. Choose a new clock or choose a new "Before and After" handout.

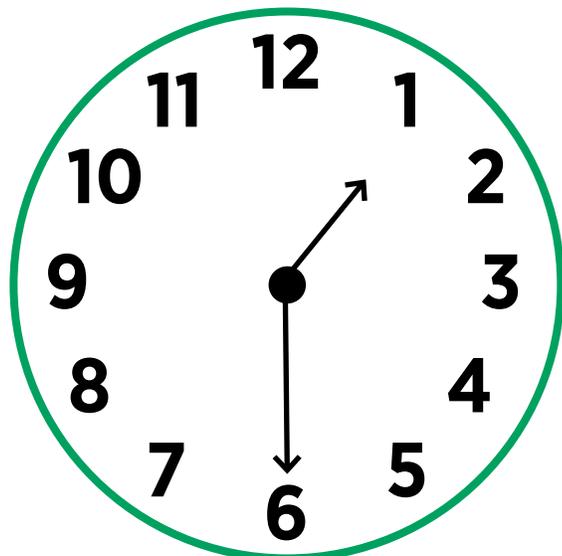
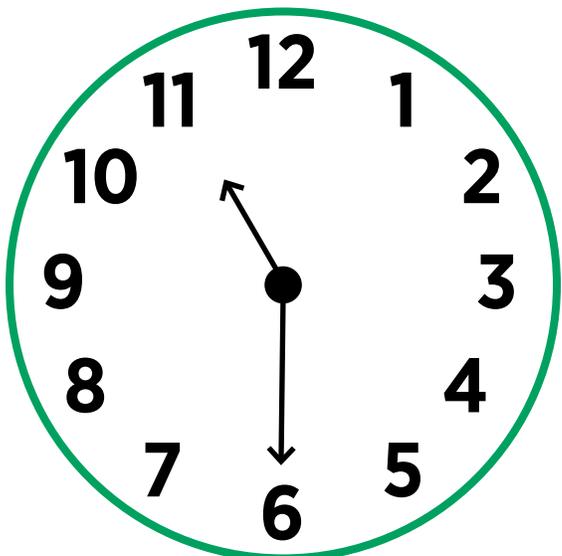
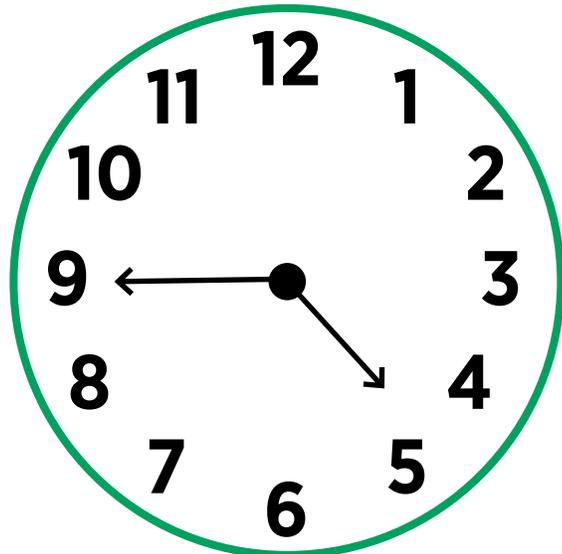
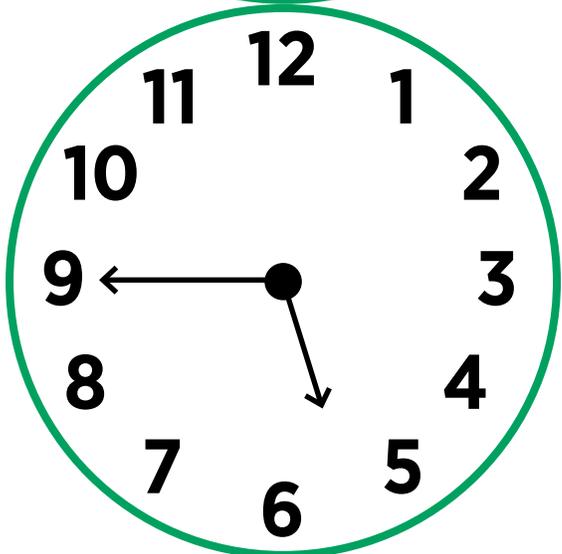
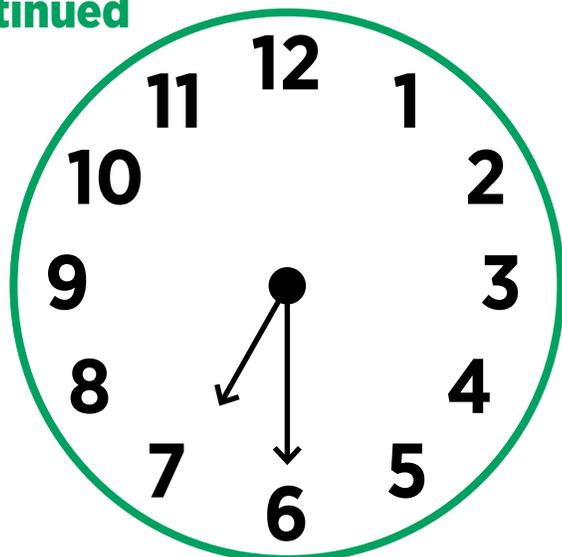
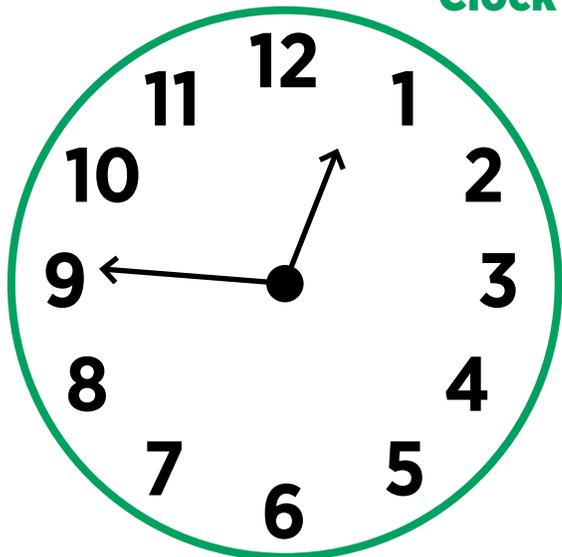
Time: Before and After

Clock Handout



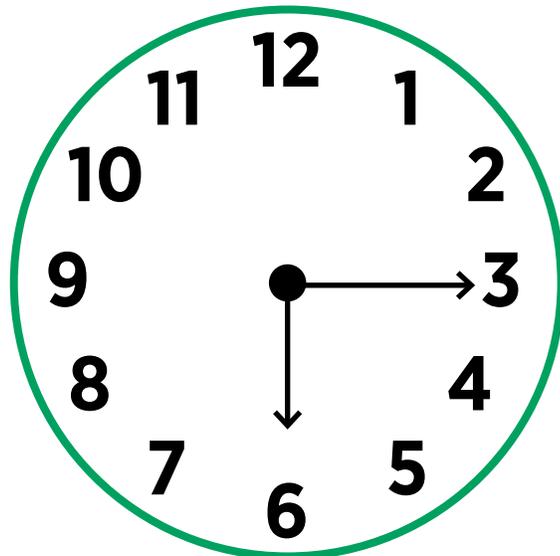
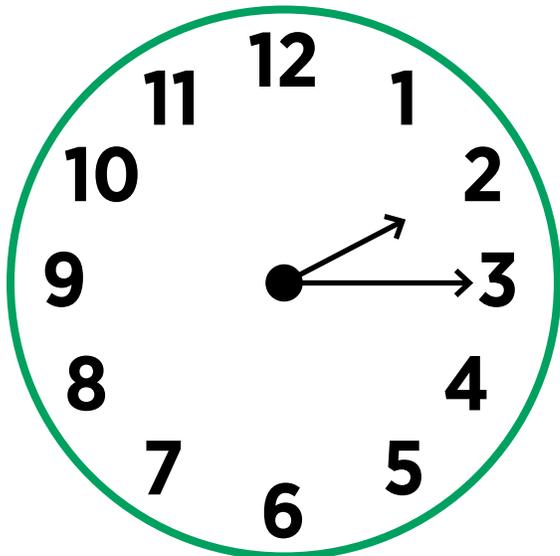
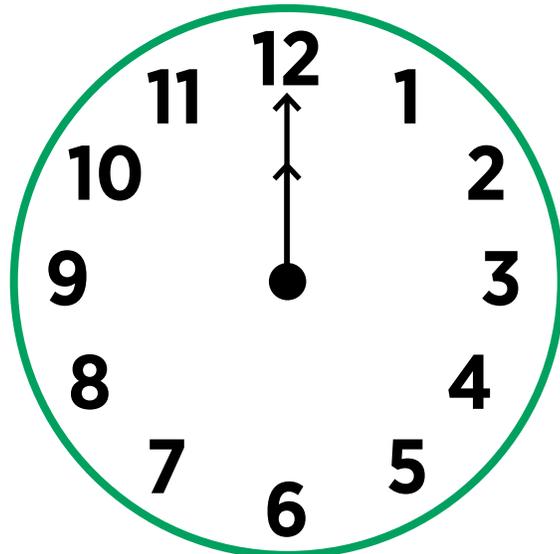
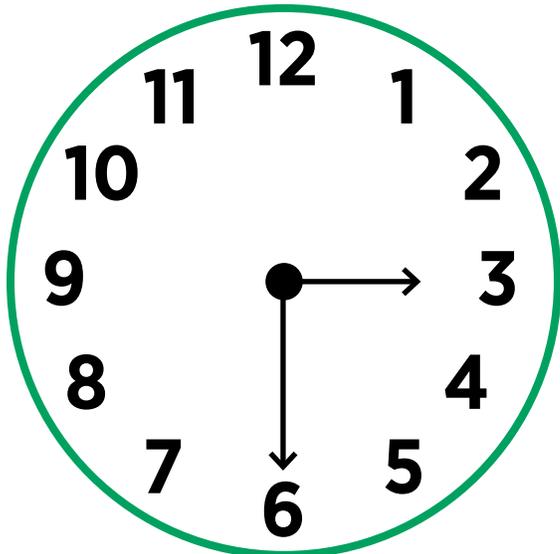
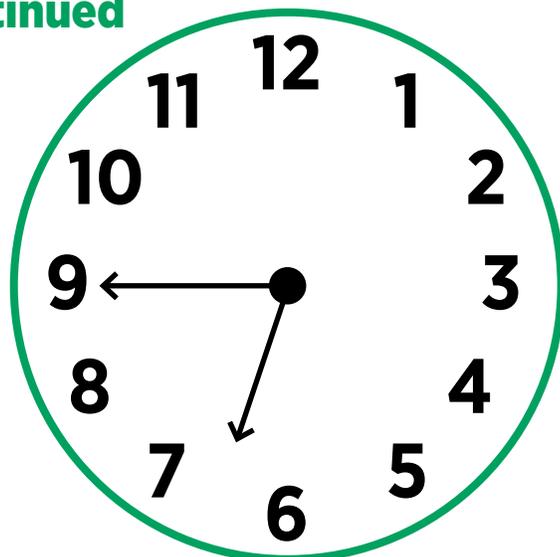
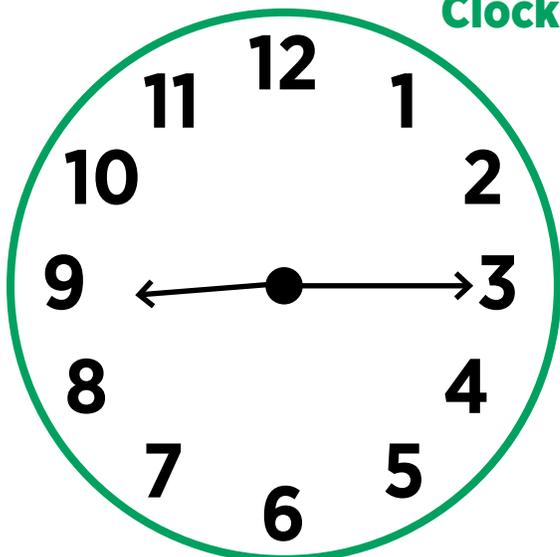
Time: Before and After

Clock Handout, continued



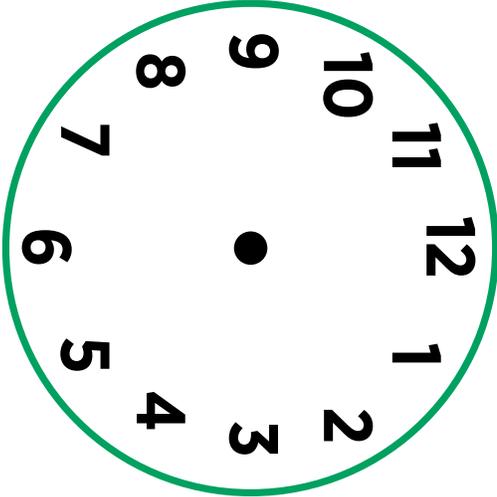
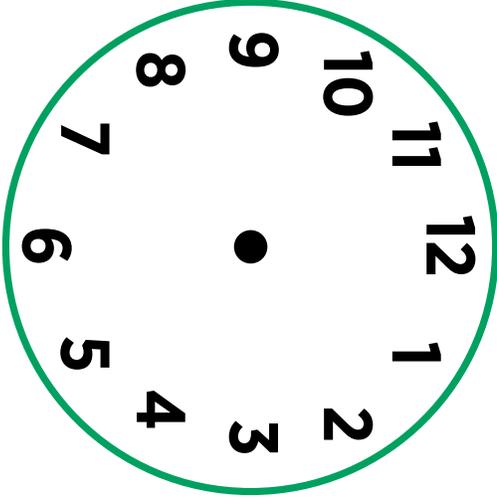
Time: Before and After

Clock Handout, continued



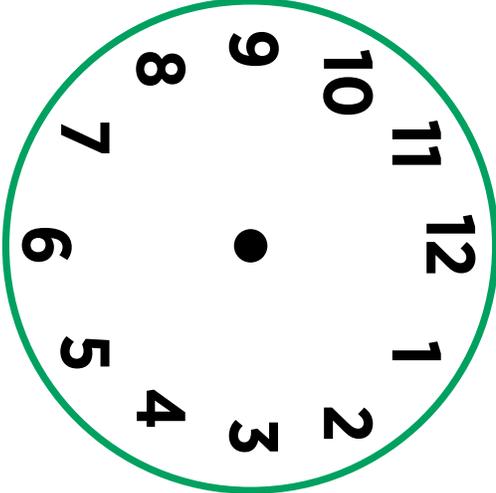
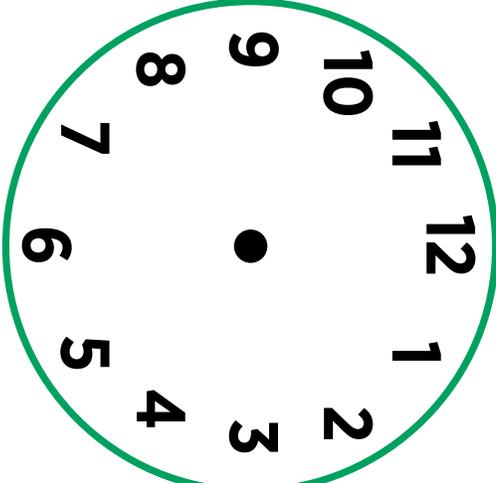
Time: Before and After

Before and After Handout

One Hour Before	Time	One Hour After
<div style="text-align: center;">  </div> <div style="border: 1px solid black; height: 30px; width: 100%; margin-top: 10px;"></div>		<div style="text-align: center;">  </div> <div style="border: 1px solid black; height: 30px; width: 100%; margin-top: 10px;"></div>

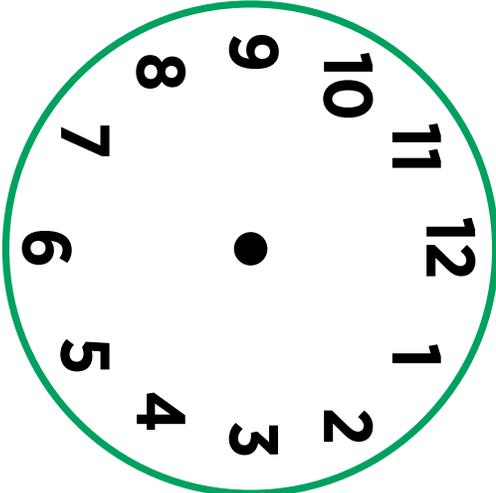
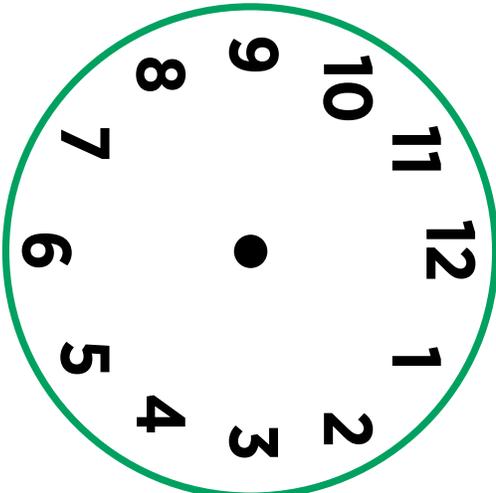
Time: Before and After

Before and After Handout, continued

<p style="text-align: center;">45 Minutes Before</p>	<div style="text-align: center;">  </div> <div style="border: 1px solid black; height: 30px; width: 100%; margin-top: 20px;"></div>
<p style="text-align: center;">Time</p>	Empty space for drawing the clock face
<p style="text-align: center;">45 Minutes After</p>	<div style="text-align: center;">  </div> <div style="border: 1px solid black; height: 30px; width: 100%; margin-top: 20px;"></div>

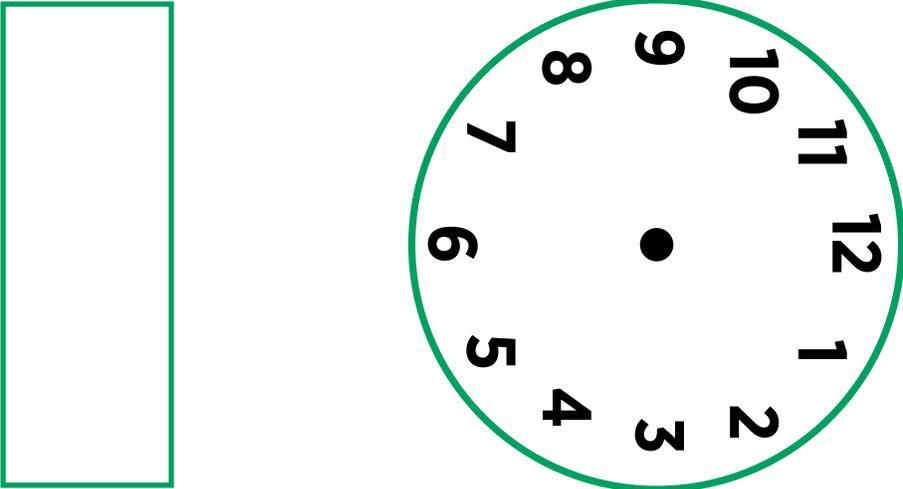
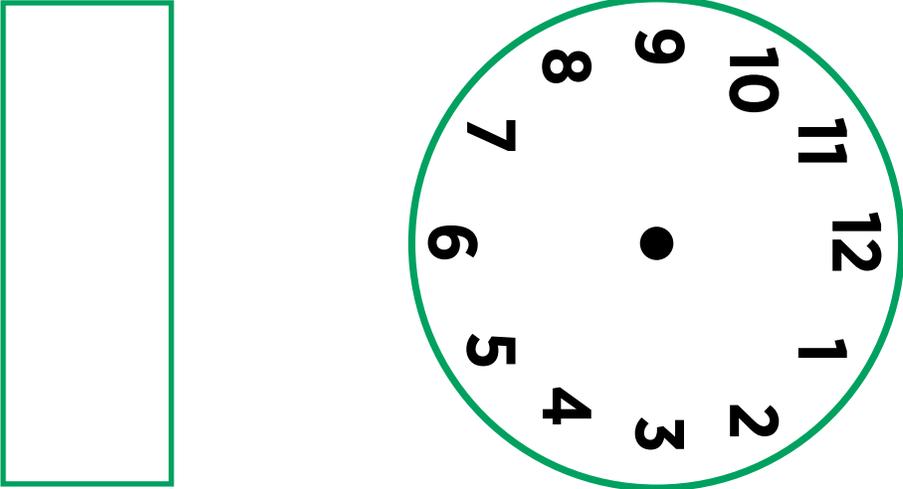
Time: Before and After

Before and After Handout, continued

30 Minutes Before	Time	30 Minutes After
<div style="border: 1px solid black; width: 100px; height: 100px; margin-left: auto; margin-right: auto;"></div> 		<div style="border: 1px solid black; width: 100px; height: 100px; margin-left: auto; margin-right: auto;"></div> 

Time: Before and After

Before and After Handout, continued

<p style="text-align: center;">15 Minutes Before</p>	<div style="text-align: center;">  </div>
<p style="text-align: center;">Time</p>	<div style="text-align: center;">  </div>
<p style="text-align: center;">15 Minutes After</p>	<div style="text-align: center;">  </div>