

1

DINNER TIME Measurement

Purpose: To plan when to start making each part of a meal so that it is all ready at 7:30 p.m.

Skill: Understanding time

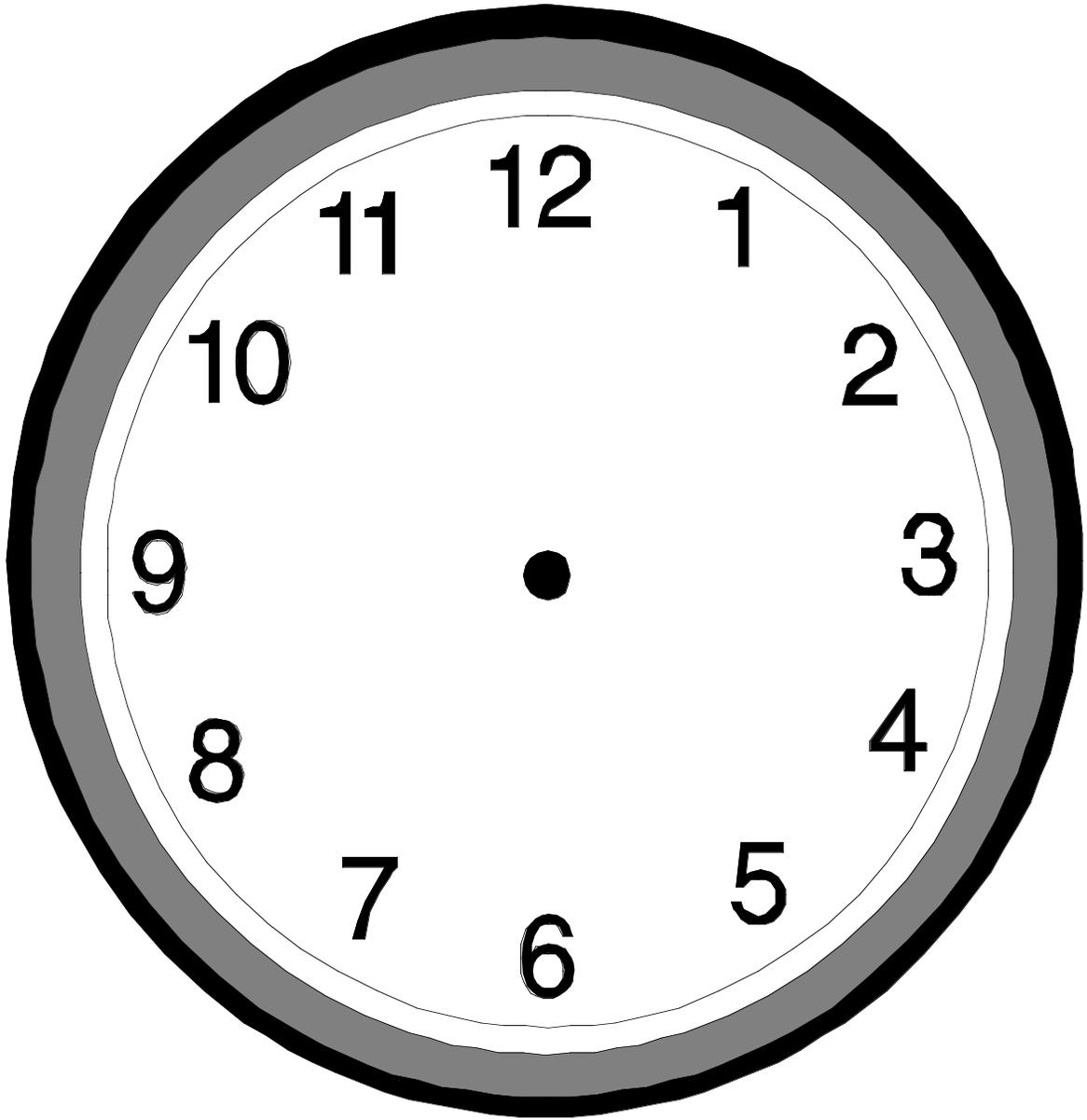
Number of People: One or small group working together

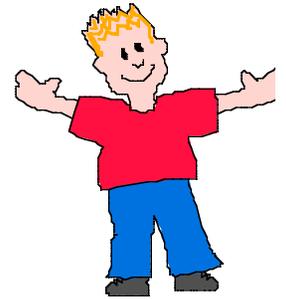
Directions: Read measurement card.

Measurement:

On Friday evening you are going to have guests for dinner. The menu and cooking time for each item is shown. If the meal is to be served promptly at 7:30 p.m., at what time must you begin cooking each part of the meal?

Menu item	Cooking time	Begin cooking at
Roast turkey	3 hrs. 30 mins.	
Baked potatoes	1 hr. 15 mins.	
Cork pudding	70 minutes	
Green beans	15 minutes	
Biscuits	12 minutes	
Coffee	10 minutes	
Chocolate cake	45 minutes	





BODY PARTS Measurement

Purpose: Measure wrist, neck and waist and see the relationship of these measurements.

Skill: Measuring in centimeters

Number of people: Measure alone, compare with classmates

Directions:

1. Use string to measure around your waist, your neck, and your wrist. Cut pieces of string matching these lengths.
2. Compare the pieces of string.
How many wrist lengths are as long as a neck length?
How many wrists make a waist?
3. Now measure the pieces of string with a meter stick and record your findings on the paper provided. Try to get the measurements from a number of classmates.
4. Can you see a relationship among these measurements for people?

Name	Wrist	Neck	Waist

Name	Wrist	Neck	Waist

Name	Wrist	Neck	Waist

PERIMETER AND AREA Measurement

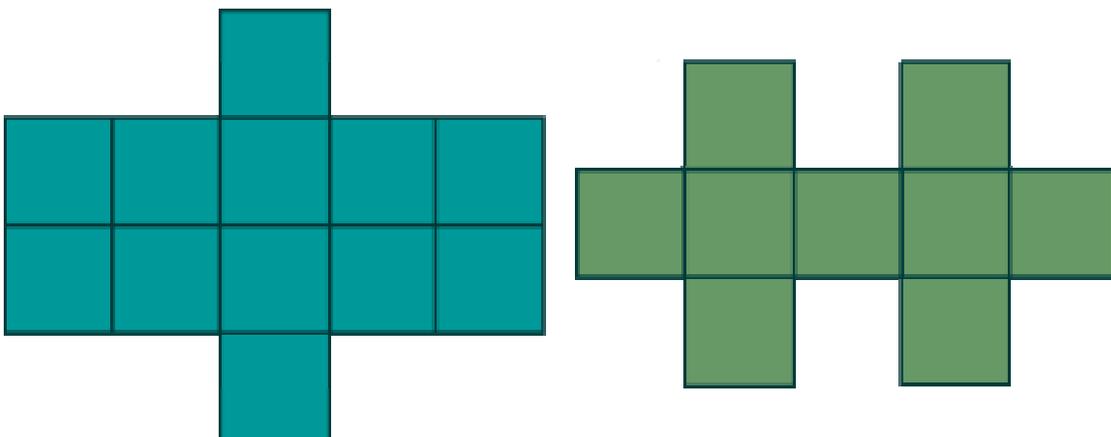
Purpose: To understand perimeter and area and design shapes according to specifications

Skill: Perimeter and area

Number of people: One or small group working together.

Directions:

1. Look at the designs below and build them with the blocks.
2. Change each one to make a new one with the same area, but a shorter perimeter.
3. Change each to make a new design that has the same area and perimeter but a different shape.
4. Remove a block so that each perimeter is greater than it was.
5. Make a design that has an area of 6 square units and:
 - a) and a perimeter of 14 units
 - b) a perimeter of 12 units
 - c) a perimeter of 10 units.
6. Which of your designs would you recommend for the shape of a swimming pool?



PLAY DOUGH MEASURING

Measurement

Purpose: Use play dough to complete the measuring tasks outlined below.

Skill: Length, volume

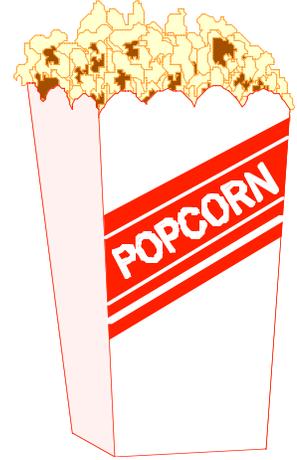
Number of people: Small groups of 2 - 3

Directions: Use the task cards on this page

<p>TASK 1 Pinch off what you think is a 15 ml piece of play dough. Press it into a measure spoon to check your estimate. Form the dough into a cube. Measure the length of each edge of the cube.</p>	<p>TASK 2 Use your 15 ml piece of play dough to form “snakes” of the following lengths: 5 cm, 1.5 dm, 22 mm Have a friend measure the length of each snake with a ruler. Which snake is the fattest?</p>
<p>TASK 3 Draw two rectangles of a piece of scrap paper. Make one 6 cm x 4 cm and the other 7 cm by 2 cm. Mold a 15 ml piece of play dough to cover each of the rectangles. Which rectangle has the thickest covering?</p>	<p>TASK 4 Measure 30 ml of play dough. Make a “snake or rope” with the play dough, then bend it to form a square that is 4 cm on each side. What is the perimeter of the square? Make a rope and bend it into the shape of a triangle that is 6 cm on each side. What is the perimeter of the triangle?</p>

5

COMPARING CYLINDERS Measurement



Purpose: To find out if cylinders that have the same surface area have the same volume.

Skill: Volume

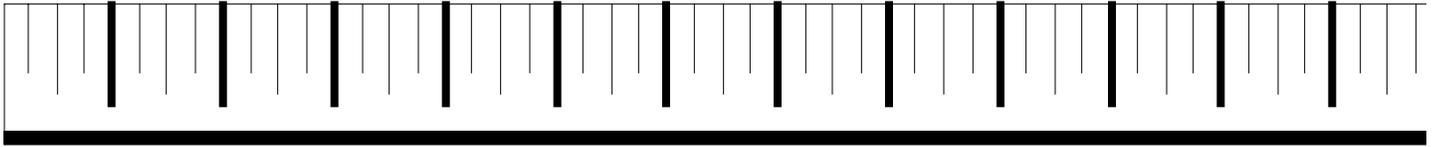
Number of people: One or small cooperative group

Directions:

1. Cut two pieces of paper 20 cm x 25 cm
2. Roll each sheet to form a cylinder, one 20 cm high and the other 25 cm high.
3. Tape the edges together and stand them on a flat surface.
4. Fill each with "packing popcorn" to compare volumes
5. Repeat with two papers of different sizes

Can you figure out a rule?

ESTIMATING LENGTH Measurement



Purpose: To estimate the length of common articles and to use the correct unit of measurement to do so.

Skill: Estimation, Measuring Length

Number of people: One or more

Directions:

1. Beginning with the objects in the bag, complete the chart using estimation and measurement. Decide which units to use (cm, mm, etc.) and use an appropriate measuring device (ruler, classroom meter stick)
2. When you have estimated and measured the items in this bag, think of your own items to add to the chart or use the following:
 - a) the width of your desk
 - b) the height of the teacher's desk
 - c) the width of the doorway
 - d) the height of a locker
 - e) the width of a window frame

