



Activity One

1a) Conversions

1 cm = _____ mm

5 ft = in

6 yds = ft

2 lbs = ____ oz

 $5 g = _{mg}$

160 oz = _____ lbs

 $5 L = _{mL} mL$

6 quarts = _____ pints

5 gallons = ____ quarts

b) Choose the correct answer

Which measurement is closest to 3 feet?

30 inches or 2 yards

Which unit would you use to tell the distance between state capitals?

feet or miles

Most aquariums are measured in terms of

cups or gallons

A car might likely weigh

1 ton or 1 ounce

c) You draw it

Using a protractor, draw an angle with the following measurements:

60°

120°

90°

d) Area and Perimeter

Below, draw the following shapes. Find the area and perimeter of each shape.

A square with each side equal to 1 inch.

A triangle with each side equal to 3 cm.





Activity Two

- **2a)** Ted drank three bottles of water during a hike. Each bottle held one-half a liter of water. How much total water did Ted drink?
- b) Jenna was using a yardstick to measure a banner to hang for a school party. The banner was folded into four equal sections. If the banner was 16 yards long, how long was each section?
- Sanjeev was measuring the temperature inside and outside of school. He found the outside temperature to be 54°F (12°C). The inside temperature was one third warmer than that. How warm was the temperature inside the school?
- **d)** Denny ran a 5 mile race. She finished the race in a time of 40 minutes. Based on her finishing time, what was the average time it took her to run 1 mile?
- e) Stefan found the length of his room was 20 feet (6 meters). The width of his room was 10 feet (3 meters). What was the area of his room?
- Allison had 12 marbles in her pocket. Half of the marbles weighed 3 grams (0.1 ounces) apiece. The other 6 marbles weighed 2 grams (0.07 ounces) apiece. How many total grams did the 12 marbles weigh?
- Mrs. Watson's class measured the shadow of a tree. It was approximately 38 feet (12 meters) long. The students wanted to convert that measurement to inches (centimeters). How many inches (centimeters) long was the shadow?
- h) Chai returned home from a day trip with his family at a quarter to midnight. He fell asleep forty-five minutes later. What time did he fall asleep?





Activity Three

- **3a)** Wendy was measuring the perimeter of a square yard. She found one length of the yard to be 30.5 feet (9.3 meters) long. How long was the perimeter of the yard?
- **b)** A cookie recipe calls for 1.5 cups of milk. If Maggie wants to make three batches of cookies, how many cups of milk will she need?
- Albert ran 200 meters three different times. He finished the first race in 14 seconds, the second race in 15.5 seconds, and the third race in 12.5 seconds. What was his average time running the race?
- **d)** Sarah weighs 45 pounds (20 kilograms). Her brother weighs one third more than her. How much does her brother weigh?
- e) Kayla built a model wooden car in class as part of a science experiment. She raced the car in class. The first time, her car went 525 centimeters (207 inches). The second time her car went 115 centimeters (45 inches) further. The final time it went 18 centimeters (7 inches) more than the second test. How far did the car travel on the final test?
- Mackenzie purchased three items for a school project. He bought a piece of poster board for 75 cents, markers for \$1.99, and a package of construction paper for \$3.50. How much total money did he spend on these items?
- g) Diego drove on a trip to an amusement park. The trip took two days. Diego drove an equal distance each day. If he drove 150 total miles (241 kilometers), how much did he travel in one day?
- **h)** Janice went to a museum. If she arrived at 9:45 AM and left the same day at 2:30 PM, how much time did she spend at the museum?





Activity Four

- **4a)** Denise cut out a triangle for a display she was making. The triangle had two long sides of equal length and a shorter side. The shorter side was 10 cm (4 in) long. The longer sides were twice as long. How long was each of these longer sides?
- b) Carter needed to fill a 2 gallon (8 liter) bucket with paint. He used a measuring cup that held 1 quart (liter) to do this. How many times would he need to fill this cup in order to use it to fill the tank?
- c) Kristina worked on her homework after school from 4:00 to 4:30. She then had to go to soccer practice. But, later that evening, she finished her homework from 7:30 to 7:45. How many total minutes did she spend doing homework?
- **d)** Chen spent \$10.00 at a store, before paying tax. Two notebooks cost a total of \$4.00. A book cost \$5.00. If she spent the rest of her money on pens, how much did the pens cost in total?
- e) Francois measured the temperature on a cold winter morning. He found it to be -2°C (28°F). If the temperature rose 5 degrees that day, how warm did it get?
- f) Louisa planned to put tiles on her floor. She knew that her floor measured 12 feet (4 meters) across. However, she needed to convert that measurement to inches (centimeters) to purchase the tiles. How many inches (centimeters) did her floor measure?
- g) David needed to serve soft drinks at a party. He knows that each bottle serves 2 L. He wanted to have enough to serve 7 L of soda. How many bottles should he purchase in order to be able to serve 7 L of soft drink?





Activity Five

- **5a)** Allen went to sleep at 8:15 PM Tuesday night. He woke up the next morning at 6:30 AM. How much time did he spend sleeping?
- **b)** Stefanie measured the width of a book using a metric ruler. She determined that the width was 1200 mm (47 in). How many cm (ft) wide was the book?
- Wan was hiking in the woods with a local outdoor group. During the first day, he hiked 7 miles (11 kilometers). The next day he hiked 8 miles (13 kilometers). The next day he hiked twice as much as he did on the first day. By the end of three days, how far had Wan hiked?
- **d)** Aimee bought a new pair of shoes for \$32.75. She gave the clerk \$35.00. How much change should she receive after she paid the clerk?
- e) The first three days of the Klondike Derby saw high temperatures of 5°F (-15°C), 7°F (-14°C), and 0°F (-18°C). What was the average high temperature for the three day event?
- Patrick is in charge of freight aboard a train. The train is pulling four cars of freight. The average load aboard each car is 5,000 kilograms (11,023 pounds). How many total kilograms (pounds) of freight will Patrick place on the train?
- Suzanne is filling containers with water as part of an experiment. There are 25 containers. Each container needs to be filled to the point that measures 1.5 cup. What is the total number of cups of water she will need?
- h) Alec drew an angle that measured 45°. The next angle he drew was 2/3 as big as that angle. How big was his second angle?



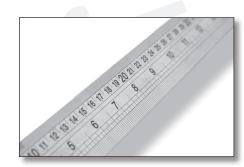


Activity Six

6) Measuring Up!

For the following activity, you will need:

- a ruler
- a protractor



measurement of the other two c	ngies. Men, ist me	e area aria p	eninerei.
		Area:	
		Perimeter:	
		s 2 inches (5	
		s 2 inches (5	
Draw a rectangle below that co the measurement of the other th		s 2 inches (5	
		s 2 inches (5	

E 7	Answers may vary.		hese answers a	re for the d	6 free bonus pag	ges, see page 3	for download ins	tructions)
5	a) 0 hours, 15 minutes	b) 120 cm (4 ff)	c) 29 miles (46 kilometers)	d) \$2.25	e) 3°F (-16°C)	f) 20,000 kg (44,092 p)	g) 37.5 cups	b) 30°
4	a) 20 cm (8 in)	b) 8 fimes	c) 45 minutes		6) \$1.00	e) 3°C (33°F)	f) 144 inches (400 centimeters)	9) 4 bottles
m	a) 122 feet (37.2 meters)	b) 4.5 cups	c) 14 seconds	d) 60 pounds (27 kilograms)	e) 658 cm (259 in)	f) \$6.24	g) 75 miles (120.5 kilometers)	h) 4 hours, 45 minutes
~	a) 1.5 liters	b) 4 yards	c) 72°F (16°C)	d) 8 minutes	e) 200 square feet (18 square meters)	f) 30 grams (1.02 ounces)	g) 456 in (1200 cm)	h) 12:30 AM
1	a) 1 cm = 10 mm; 5 ft = 60 in; 6 yds = 18 ft; 2 lps - 32 or;	5 g = 5000 mg; 160 oz = 10 lbs; 5 liters = 500 ml; 6 quarts = 12 pints; 5 gallons = 20 quarts	b) 30 inches; miles; gallons;	1 ton	c) Answers may vary.		d) Answers may vary.	(₹)