Mathematics Curriculum Worksheets

Line Measurement

Color Group _______________

Use your ruler to measure the length of each of these lines. Place your answers in centimeters in the spaces provided.

A ________  G ________
B ________  H ________
C ________  I ________
D ________  J ________
E ________
F ________

A
B
D E
F
G
H I
A
B
C
D
E
F
Introduction to Perimeter

Color Group ________________

The distance around a figure is the **perimeter**. You find the **perimeter** of a figure by adding the lengths of the sides.

Use your ruler and measure the length in centimeters of each side of the rectangle shown below. Put your answers in the spaces at the bottom of the page. Add the lengths of the four sides to find the **perimeter**.

Add the lengths of each side of the rectangle to find the **perimeter** of the rectangle.

\[
\text{Side A} \quad + \quad \text{Side B} \quad + \quad \text{Side C} \quad + \quad \text{Side D} \quad = \quad \text{Perimeter}
\]
Calculating Perimeter

Use your ruler and measure the length in centimeters of each side of shapes shown below. Put your answers in the spaces beside each shape. Add the lengths of the four sides to find the **perimeter**.

![Diagram of a rectangle]

\[
\frac{A}{A} + \frac{B}{B} + \frac{C}{C} + \frac{D}{D} = \text{Perimeter}
\]

![Diagram of a square]

\[
\frac{A}{A} + \frac{B}{B} + \frac{C}{C} + \frac{D}{D} = \text{Perimeter}
\]
Perimeter of Rectangles
Color Group ________________

Use your ruler to measure the **perimeter** of the rectangles and squares below. Place your answers in centimeters in the spaces provided.

Use your ruler to measure the **perimeter** of the rectangles and squares below. Place your answers in centimeters in the spaces provided.

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
</tr>
</tbody>
</table>

#3
More Practice with Perimeter of Rectangles

Color Group ________________

Use your ruler to measure the perimeter of the rectangles and squares below. Place your answers in centimeters in the spaces provided.

A  ________
B  ________
C  ________
D  ________
E  ________
F  ________

E

F
As you learned in a previous activity, the distance around a figure is the **perimeter**. We add the length of all the sides to find the **perimeter**. Measure each figure below and find the **perimeter**. Place your answers in centimeters in the spaces provided.

**Perimeters of Polygons**

Color Group ________________

A. $6 + 5 + 2 + 2 + 4 + 3 =$

B. ________________

C. ________________

D. ________________

E. ________________

F. ________________
As you learned in a previous activity, the distance around a figure is the **perimeter**. We add the length of all the sides to find the **perimeter**. Measure each figure below and put your measurements on the lines by each figure. Add the lengths of each side and place your answers in centimeters in the spaces provided.

A. \[3+2+1+2+4+6+6+4+2+2\]  
B.  
C.  
D.  
E.  

#6
Multiple Sided Perimeters

Color Group ________________

We add the length of all the sides of a figure to find the **perimeter**. Measure each figure below and put your measurements on the lines by each figure. Add the lengths of each side and place your answers in centimeters in the spaces provided.

A. \[2 + 2 + 3 + 1 + 2 + 6 + 7 + 3 = \]

B. ________________

C. ________________

D. ________________

E. ________________

---

A. 

B. 

C. 

D. 

E. 

---

#7
Introduction to Area

Group Color ________________

The area of a figure is the number of square units needed to cover that figure. The square unit we will use is a square centimeter. Use the grid squares as units. Count the number of square units in each figure to find its area. Give the area of each figure in square centimeters.

1 square = 1 square centimeter

A.  
B.  
C.  
D.  
E.  
F.  

#8
Calculating Area

Color Group __________________

Counting the square units is not the easiest way to find the area of a figure. You can find the area of a rectangular region by multiplying the length by the width. Multiply the length by the width to find the areas of the rectangles below.

Area = Length $\times$ Width

<table>
<thead>
<tr>
<th>Length</th>
<th>Width</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>3</td>
<td>21</td>
</tr>
</tbody>
</table>

Calculating Area

A. $\frac{7}{\text{Length}} \times \frac{3}{\text{Width}} = \frac{21}{\text{Area}}$

B. $\frac{\text{Length}}{\text{Width}} = \frac{\text{Area}}{\text{}}$

C. $\frac{\text{Length}}{\text{Width}} = \frac{\text{Area}}{\text{}}$

#9
Area Calculations

Color Group ____________________

Find the area of the rectangular regions below by multiplying the length by the width. Write your answers in square centimeters.

<table>
<thead>
<tr>
<th>A.</th>
<th>B.</th>
<th>C.</th>
<th>D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
<td>Width</td>
<td>Area</td>
<td></td>
</tr>
<tr>
<td>Length</td>
<td>Width</td>
<td>Area</td>
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</tr>
<tr>
<td>Length</td>
<td>Width</td>
<td>Area</td>
<td></td>
</tr>
</tbody>
</table>

#10
More Fun with Area Calculations
Color Group _______________
Find the area of the rectangular regions below by multiplying the length by the width. Write your answer in square centimeters.
A. _______________
B. _______________
C. _______________
D. _______________
E. _______________
Measuring and Calculating Area

Color Group ________________

Use your ruler to measure the **length** and **width** of the rectangles below. Find the **area** of each rectangle by multiplying the **length** by the **width**. Take your measurements in centimeters and write your answer in square centimeters. Write your answers on the lines at the bottom of the page.

A. 
B. 
C. 
D. 
E. 

A. ________________
B. ________________
C. ________________
D. ________________
E. ________________

#12
Introduction to Squares

Color Group ____________________

Squares are special types of rectangles. Since all four sides of a square are the same length, you can find the perimeter of a square by multiplying the length of one side by 4.

The area of a square is calculated the same way the area of a rectangle is calculated. Since the length and width of a square are the same, you can calculate the area by measuring any side and multiplying that number by itself. We call this squaring the number.

Area
8 \times 8 = 64 \text{ sq cm}

Perimeter
8 \times 4 = 32
**Square Area and Perimeter**

Color Group __________________________

Use your ruler to measure the **length** and **width** of the squares below. Find the **area** and **perimeter** of each square. Take your measurements in centimeters and write your answers in square centimeters and centimeters. Write your answers on the lines at the bottom of the page.

A.  

B.  

C.  

D.  

A. area= __________________ perimeter = _____________

B. area= __________________ perimeter = _____________

C. area= __________________ perimeter = _____________

D. area= __________________ perimeter = _____________
Desk Plan

This plan shows what a desk could look like from above. Each square in the desk plan is equal to one square centimeter. Using the items on the desk, answer the questions on the next page.

PIECE OF PAPER - 5 cm x 7 cm
TELEPHONE - 4 cm x 3 cm
BOOK - 3 cm x 5 cm
ERASER - 4 cm x 2 cm
PENCIL - 5 cm x 1 cm
Desk Plan Answer Sheet

Color Group ____________________________

1. What is the length of the desk?
       ________________________________

2. What is the width of the desk?
       ________________________________

3. How many square centimeters is the desk?
       ________________________________

4. How many square feet does each item below cover?
   PAPER_________ TELEPHONE___________ BOOK_______
   ERASER___________ PENCIL ______________

5. How many square centimeters will all five items cover?
       ________________________________

6. How many square centimeters will be left on the desk after each item is placed?
       ________________________________
Area and Perimeter

Color Group ______________________

Find the area and perimeter of each of the rectangles and figures below. Answer the questions at the bottom of the page when you are finished.

Area = _____
Perimeter = _____

Area = _____
Perimeter = _____

Area = _____
Perimeter = _____

Area = _____
Perimeter = _____

Area = 11
Perimeter = 24

Area = _____
Perimeter = _____

Area = 7
Perimeter = 18

7. Are the area and the perimeter of a shape always the same? ______

8. Do rectangles which have the same area always have the same perimeter? ________
Triangle Height and Base

Color Group __________________

The width of a triangle is called the base. The height of a triangle is the distance straight up from the baseline to the top of the triangle.

The base of the above triangle is 5 cm.
The height of the above triangle is 7 cm.

The base of the above triangle is 6 cm.
The height of the above triangle is 7 cm.

The base of the this triangle is 3 cm.
The height of the this triangle is 6 cm.

Do the problems on the next page
Finding Height and Base

Color Group ________________________

Find the base and height of each of the triangles below. The first triangle has been completed for you.

A. Base ____________
   Height ____________

The base of the above triangle is 4 cm.

The height of the above triangle is 6 cm.

B. Base ____________
   Height ____________

C. Base ____________
   Height ____________

#16B
Practice Finding Height and Base

Color Group ____________________________

Find the base and height of each of the triangles below.

A. Base ___________          B. Base ___________
    Height ___________          Height ___________

C. Base ___________          D. Base ___________
    Height ___________          Height ___________ #17
One-Half
Color Group _________________

One-half of 2 is 1.
One-half of 6 is 3.
One-half of 24 is 12.

A. What is one-half of 4? _________________
B. What is one-half of 8? _________________
C. What is one-half of 40? _________________
D. What is one-half of 22? _________________
E. What is one-half of 64? _________________
F. What is one-half of 36? _________________
G. What is one-half of 50? _________________
H. What is one-half of 72? _________________
Triangle Areas

You learned that the area of a rectangle is found by multiplying the length by the width. The length of the rectangle below is 5 centimeters. The width of the rectangle is 4 centimeters. The area of the rectangle is 20 square centimeters.

You learned that the width of a triangle is called the base and the height of a triangle is the distance straight up from the line where the base is to the top of the triangle.

The triangle at the left covers one-half of the rectangle. The area of this triangle is 10 square centimeters because one-half of 20 is 10.

The area of triangle is found by multiplying the base by the height and finding one-half of that answer.

The base of this triangle is 6 cm.
The height of this triangle is 7 cm.

\[ 6 \times 7 = 42 \]

Area = one half of (base x height)

One-half of 42 is 21

The area of the triangle is 21 sq. cm.
Triangle Areas

Color Group ________________

Find the area of each of the triangles below.

A.
Base = _____
Height = _____
Base x Height = _____
One-half of Base x Height = _____

B.
Base = _____
Height = _____
Base x Height = _____
One-half of Base x Height = _____

C.
Base = _____
Height = _____
Base x Height = _____
One-half of Base x Height = _____
More Triangle Areas

Color Group __________________

Find the area of each of the triangles below.

A. Area = _______

B. Area = _______

C. Area = _______

#20
Estimating Circle Area

Color Group ________________

The area of an object is the number of square units it covers. As you already learned, one way to find the area is to count the number of square units the object covers. Sometimes an object covers only part of a square unit. When this happens, you need to find another part of a square unit that is covered and count the two units as one.

Count how many squares the circle covers. Put a check in each square after you count it. If only part of a square is covered, find another part of a square and count the two parts as one full square.

Estimate ____________________
Practicing Circle Area

Color Group ________________

Count how many squares the circles below cover. Put a check in each square after you count it. If only part of a square is covered, find another part of a square and count the two parts as one full square.

Write what you think the area is on the lines below each circle.

A. _______ sq. units

B. _______ sq. units

C. _______ sq. units

#22
Other Shape Areas

Color Group ______________________

Count how many squares the shapes below cover. Put a check in each square after you count it. If only part of a square is covered, find another part of a square and count the two parts as one full square. Write what you think the area is on the lines below each shape.

A. __________ sq. units

B. __________ sq. units

C. __________ sq. units