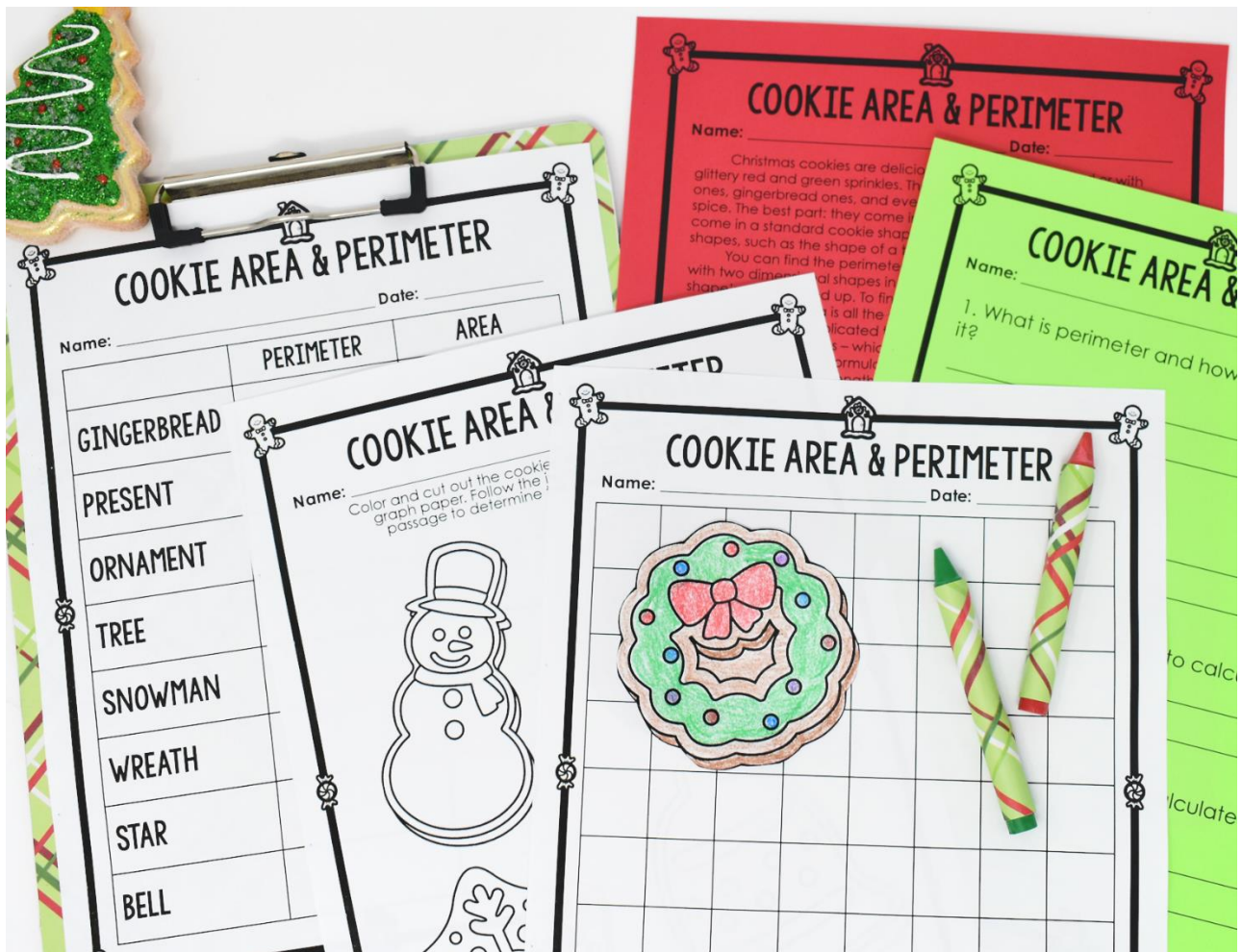# COOKIE AREA & PERIMETER

COOKIE AREA & PERIMETER

Name: _____ **Date:** _____

    Christmas cookies are delicious. They often come iced or with glittery red and green sprinkles. There are sugary ones, chocolatey ones, gingerbread ones, and even ones with some festive holiday spice. The best part: they come in all shapes and sizes. Sure, some might come in a standard cookie shape, but many come in special holiday shapes, such as the shape of a tree, snowman, sleigh, or Santa himself.

    You can find the perimeter and area of cookies, just like you do with two dimensional shapes in class. Perimeter is the total length of a shape's sides, added up. To find perimeter, measure the sides and combine them. Area is all the space found *within* the sides of a shape. It's a little more complicated to calculate. That's because different kinds of regular shapes – which are shapes with equal angles and equal sides – have different formulas for area. To find the area of a square, for example, multiply the length by the width. Finding the areas of other regular shapes usually requires more complicated formulas.

    Things get even *more* complicated when we start talking about *irregular* shapes. Those are shapes with different sized angles and side lengths. Some irregular shapes are easier to work with than others. That's because they're easy to break up into common regular shapes. If this is possible, break the irregular shape into regular shapes. Then, find the areas of these regular shapes and add them up. If you're dealing with a *very* irregular shape, though (such as a Christmas cookie!), you might need to try another method.

    This method uses grid paper. It doesn't allow for an *exact* measurement of area, but it *will* give you a pretty good estimation. First, find the area of one of the grids on your grid paper by multiplying two of its sides together. Now, trace the cookie onto the grid paper. Count the number of *full* squares inside your cookie. Next, count the squares that are exactly *half* full of cookie. Then, count the number of squares that are *more* than half full of cookie. Count these as one square. Any square *less* than half full of cookie, ignore. Total up all the units you're counting as a whole or half square. (Two halves equal a whole.) Then, multiply that total by the area of a single square, which you calculated earlier. That's the area of your cookie!

COOKIE AREA & PERIMETER

Name: _____ **Date:** _____

1. What is perimeter and how do you calculate it?

_____

_____

2. What is area?

_____

_____

3. Why is area complicated to calculate?

_____

_____

4. What is the easiest way to calculate the area of irregular shapes?

_____

_____

COOKIE AREA & PERIMETER
ANSWERS

1. What is perimeter and how do you calculate it?

The total length of a shape's sides, added up. To find perimeter, measure the sides and combine them.

2. What is area?

All the space found *within* the sides of a shape.

3. Why is area complicated to calculate?

Because some shapes are regular, and some are irregular.

4. What is the easiest way to calculate the area of irregular shapes?
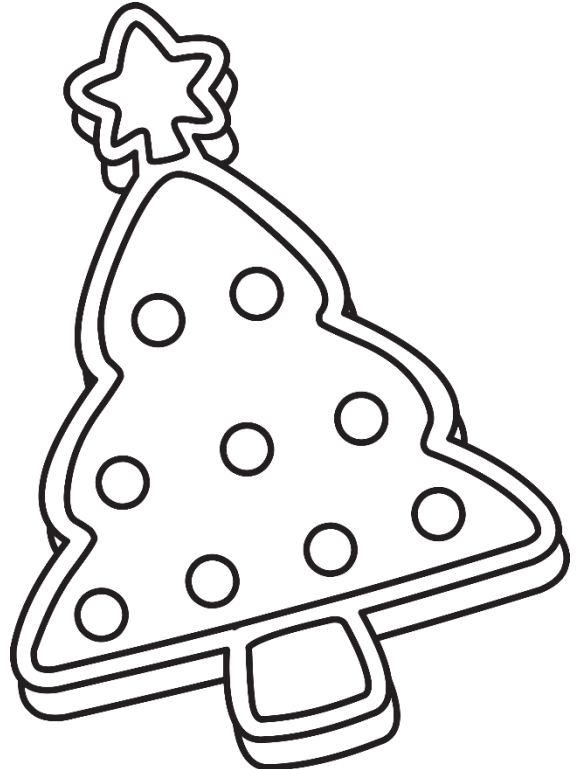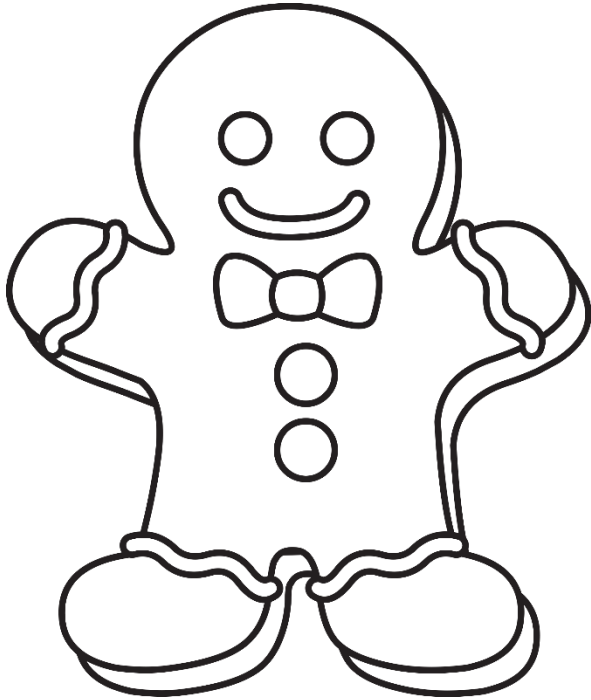
Break it up into regular shapes.

COOKIE AREA & PERIMETER

Name: _____ **Date:** _____

Each square=1 inch by 1 inch

COOKIE AREA & PERIMETER
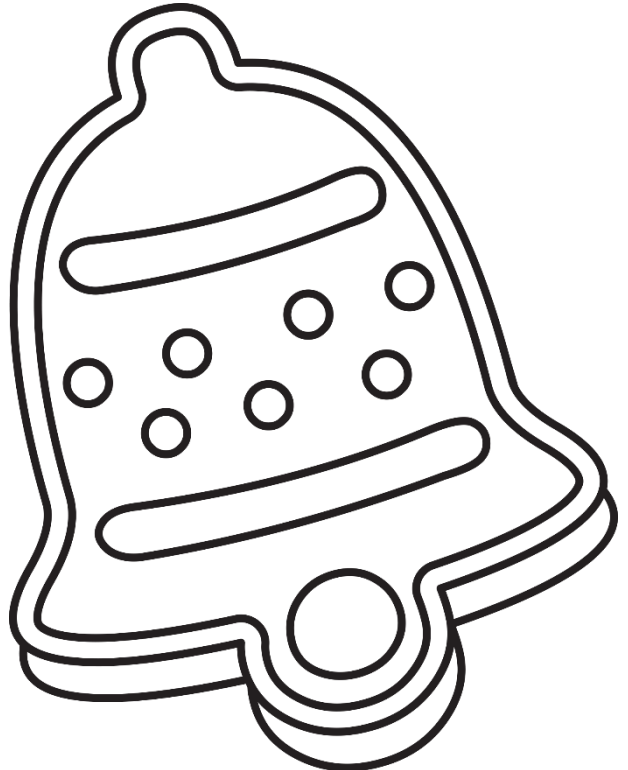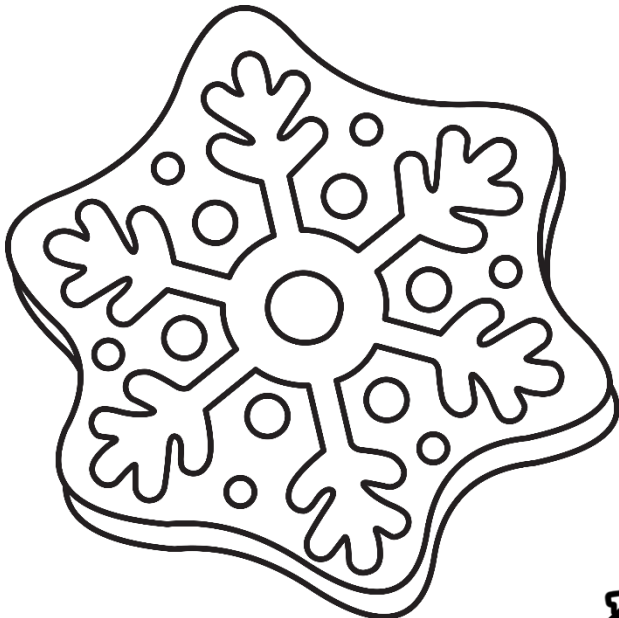
Name: _____ **Date:** _____

Color and cut out the cookies, then trace them onto the graph paper. Follow the instructions in the reading passage to determine the perimeter and area.

COOKIE AREA & PERIMETER
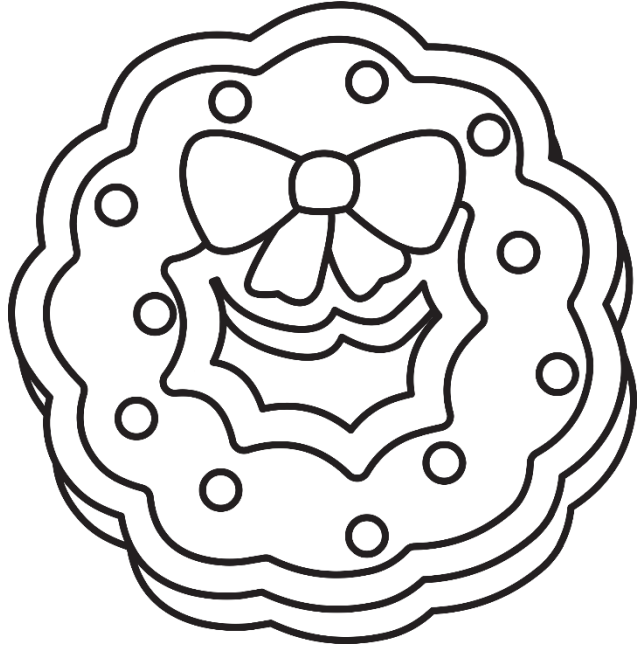
Name: _____ **Date:** _____

Color and cut out the cookies, then trace them onto the graph paper. Follow the instructions in the reading passage to determine the perimeter and area.

COOKIE AREA & PERIMETER

Name: _____ **Date:** _____

	PERIMETER	AREA
GINGERBREAD		
PRESENT		
ORNAMENT		
TREE		
SNOWMAN		
WREATH		
STAR		
BELL		

This resource was created by Jennifer Findley.
- It **<u>may</u>** be printed and photocopied for single classroom use.
- It **<u>may</u>** be placed on secure learning management systems or platforms such as Canvas and Google Classroom.
- It **<u>may not</u>** be put on the open, searchable, unsecure Internet, sold, or distributed in any other form.
- It **<u>may not</u>** be added to the Canvas Commons and shared with other teachers.

Check out my store for more resources for grades 3-5.

Follow my blog for updates and freebies.

www.JenniferFindley.com

Thanks!
Jennifer Findley