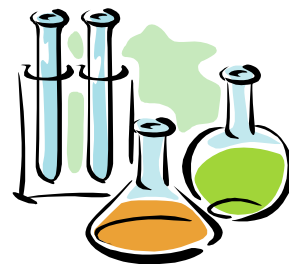


Student Perspective Activity:

DynaNotes Chemistry End-of-Course Student Review Guide



1. Which element has an electron configuration that can be shown as $1s^2 2s^2 2p^6 3s^1$ or $[\text{Ne}] 3s^1$?

- A. lithium (Li)
- B. neon (Ne)
- C. sodium (Na)
- D. potassium (K)

3. What is the approximate molar mass of methane (CH_4)?

- A. 1 gram
- B. 6.02×10^{23} grams
- C. 12 grams
- D. 16 grams

2. Are Na_2S and BaSO_4 soluble in water?

- A. Both Na_2S and BaSO_4 are soluble in water.
- B. Na_2S is soluble in water, but BaSO_4 is not soluble.
- C. BaSO_4 is soluble in water, but Na_2S is not soluble.
- D. Neither Na_2S nor BaSO_4 are soluble in water.



Card Reader, act out the following word without speaking. Read aloud the clue before you begin. Your team can keep guessing until the time is up.

Clue:

Term to be Acted Out:

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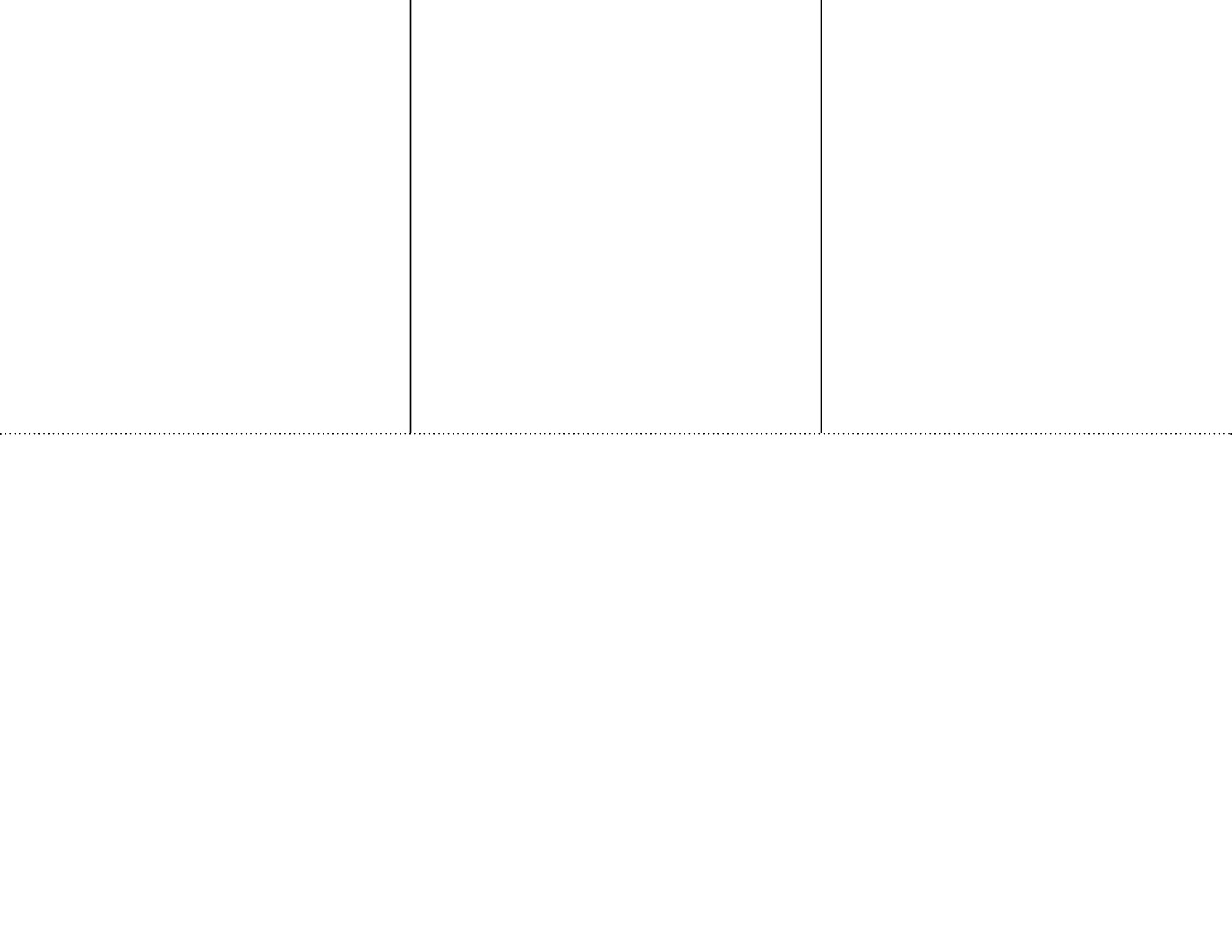


Card Reader, draw the following word without speaking. Read aloud the clue before you begin. Your team can keep guessing until the time is up.

Clue:

Term to be Drawn:

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Period Place Value Recording Sheet (pp. 2 of 2)

Billions			Millions			Thousands			Units		
H	T	O	H	T	O	H	T	O	H	T	O

- What is the value of the ten billions place?
- What digit is in the ones place?
- What is the value of the hundred millions place?
- What digit is in the hundred billions place?
- What is the value of the thousands place?

Use the chart below to represent your number multiple ways.

Expanded Notation	Word Form	Standard Form

Period Place Value Recording Sheet (pp. 1 of 2)

Billions	Millions	Thousands	Units
H T O	H T O	H T O	H T O
1 0 3	4 8 9	2 3 9	8 0 2

- What is the value of the ten billions place?

0

- What is the value of the hundred millions place?

400,000,000

- What is the value of the thousands place?

9,000

- What digit is in the ones place?

2

- What digit is in the hundred billions place?

1

Use the chart below to represent your number multiple ways.

Expanded Notation	Word Form	Standard Form
$100,000,000,000 + 3,000,000,000$ $+ 400,000,000 + 80,000,000 + 9,000,000$ $+ 200,000 + 30,000 + 9,000 + 800 + 2$	<i>one hundred three billion, four hundred</i> <i>eighty-nine million, two hundred</i> <i>thirty-nine thousand, eight hundred two</i>	103,489,239,802

Date _____

You are a blogger who must write a short article for your website that reports on a new scientific discovery (fictional). Think of an Earth and Space discovery idea, and write the title of your article on the line below.

Write a short, creative article that uses each of the three terms. Circle the words wherever they appear.

1 point for good writing mechanics (grammar, capitalization, punctuation, and spelling)

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page, typical of notebook paper. There are no margins, text, or other markings on the page.

Date _____

You are an immigrant to one of the thirteen British colonies who is writing a letter home to tell your family about life in the New World. Choose a colony and decide who you are. Write the colony's name and your description on the line below.

Choose three terms that relate to your idea from *Colonial Era* (page 1) of the DynaNotes Grade 8 Social Studies for STAAR student review guide and write them on the lines below.

Scoring: 3 points for demonstrating that you understand what each term means

1 point for creativity and story quality

This image shows a single page of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page, typical of notebook paper or a template for writing practice. There are no margins, text, or other markings on the page.

Date _____

You are writing a letter to a friend to tell him/her about the similarities and differences between the geography of your home country and the country you are visiting. Choose a home country and a destination country from page 7 of the DynaNotes World Geography End-of-Course student review guide.

Choose three terms that relate to your ideas from *Category 2: Geography* (on pages 1 and 2) and write them on the lines below.

1 point for good writing mechanics (grammar, capitalization, punctuation, and spelling)

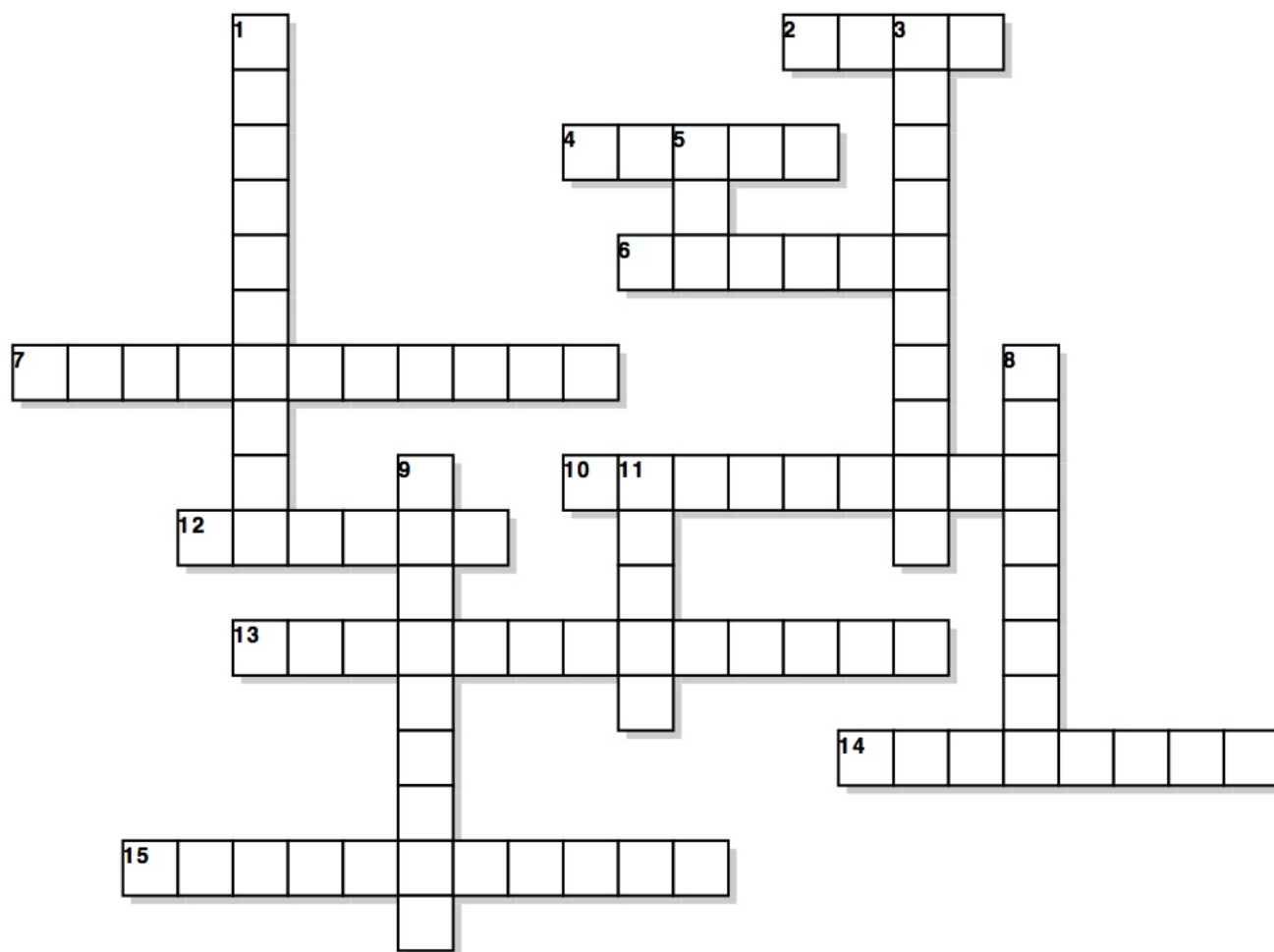
This image shows a single sheet of white paper with horizontal blue ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Solve the crossword puzzle. Reference the DynaNotes
Biology EOC student review guide (page 2) as needed.

Name: _____

Date: _____

Category 2 – Mechanisms of Genetics



Across

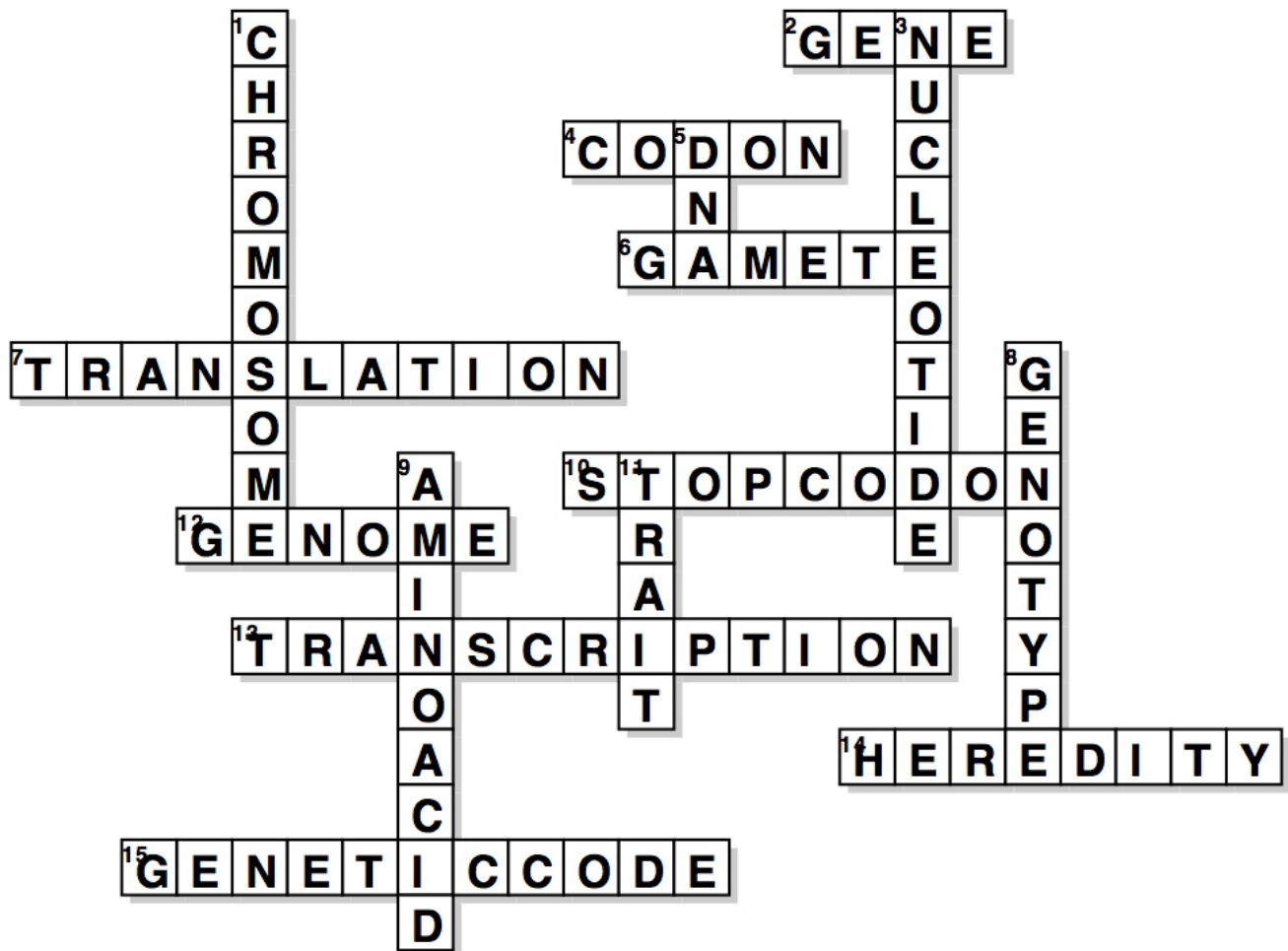
- 2 Segment of DNA
- 4 GCA
- 6 Egg or sperm
- 7 Process to produce a protein that uses mRNA, tRNA, amino acids, and ribosomes
- 10 Terminates translation process
- 12 Set of all genes that specifies an organism's traits
- 13 Process that makes mRNA
- 14 Passing of traits from one generation to the next
- 15 Language of codons

Down

- 1 Structure in cell's nucleus that contains DNA
- 3 Made of sugar, phosphate group, and nitrogen base
- 5 Genetic information with a double helix structure
- 8 Combination of alleles represented by two letters, such as bb or Bb
- 9 Specified by a codon
- 11 Black hair

Answer Key

Category 2 – Mechanisms of Genetics



Across

- 2 Segment of DNA
- 4 GCA
- 6 Egg or sperm
- 7 Process to produce a protein that uses mRNA, tRNA, amino acids, and ribosomes
- 10 Terminates translation process
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Dilation Exemplar Instruction Card

- ☐ Draw an original polygon, label it "original," and estimate its area.*
- ☐ Choose the location of a fixed point and label it "fixed point."
- ☐ Choose a scale factor for an enlargement or a reduction (must fit on the page).
- ☐ Draw dashed lines from the fixed point to each vertex on the polygon.
- ☐ Measure and label the length of each dashed line in centimeters (i.e., 5.1 cm).
- ☐ Multiply each measurement by the scale factor to find the correct distances between the fixed point and the new vertices along the same dashed lines.
- ☐ Draw each new vertex (extend dashed lines as needed), connect the new vertices, and label the new polygon "new."
- ☐ Estimate the new polygon's area. Compare to: $A_{\text{new}} = A_{\text{original}} \cdot (\text{scale factor})^2$

**Use graph paper and choose a shape with an area that is easy to estimate.*

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**Use graph paper and choose a shape with an area that is easy to estimate.*

Dilation: _____ Scale Factor = _____ Name: _____

$A_{\text{original}} \approx$ _____ cm^2 $A_{\text{new}} \approx$ _____ cm^2 $A_{\text{calculated}} = (\quad) \bullet (\quad)^2 =$ _____ cm^2

