

# Getting Ready For 6th Grade

# SUMMER MATH

## Review



NAME: \_\_\_\_\_

Name: \_\_\_\_\_

## Adding & Subtracting Fractions

with Unlike Denominators

a.  $\frac{5}{8} + \frac{1}{4} =$

b.  $\frac{6}{10} - \frac{2}{5} =$

c.  $\frac{8}{12} - \frac{3}{6} =$

d.  $\frac{2}{3} + \frac{4}{9} =$

e.  $\frac{4}{5} + \frac{8}{10} =$

f.  $\frac{3}{4} - \frac{2}{3} =$

g.  $\frac{4}{9} - \frac{1}{3} =$

h.  $\frac{1}{4} + \frac{4}{12} =$

i.  $\frac{3}{5} + \frac{1}{3} =$

j.  $\frac{1}{2} - \frac{1}{5} =$

k.  $\frac{5}{6} - \frac{1}{2} =$

l.  $\frac{1}{2} + \frac{1}{3} =$

Answer each question.

Georgetown Skating Rink held a public skating session on Saturday. They sold 78 adult tickets for \$8 each and 129 children's tickets for \$6 each. How much money did the rink make in all?

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Jeff takes the train from Boston to Baltimore. The route is 416 miles long one-way. If Jeff goes to Baltimore and back 3 times, how many miles will he travel?

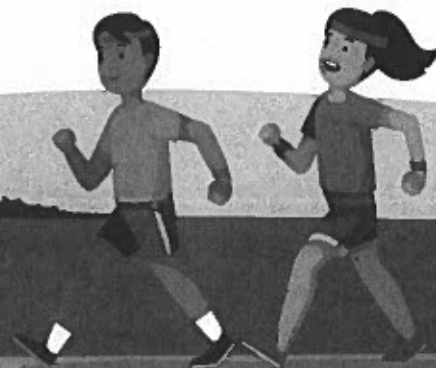
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Izzy's Craft Studio offers necklace-making classes. There are 3 classes each week, with 28 students in each class. Each student is given 50 beads to make a necklace. How many total beads are given out each week?

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Mr. Aiken gave his class a reading challenge last week. The students could pick between two books: a 225-page novel or a 198-page book of short stories. If 18 students read the novel and 12 students read the book of short stories, how many total pages did the class read?

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Name: \_\_\_\_\_

## Mixed Number Subtraction

a.  $12\frac{1}{2} - 7\frac{1}{4} =$  \_\_\_\_\_

b. Subtract  $3\frac{3}{8}$  from  $6\frac{3}{4}$ .

c. Jaliyah made a salad with  $2\frac{1}{3}$  bags of romaine lettuce and  $2\frac{5}{6}$  bags of iceberg lettuce. How many more bags of iceberg lettuce did Jaliyah use than romaine lettuce?

Show your work.

answer: \_\_\_\_\_

d. At the farmer's market, Lang bought  $3\frac{2}{5}$  pounds of broccoli and  $2\frac{1}{2}$  pounds of carrots. How many more pounds of broccoli did Lane buy than carrots?

Show your work.

answer: \_\_\_\_\_

e. Subtract  $2\frac{1}{12}$  from  $5\frac{1}{3}$ .

f.  $2\frac{4}{9} - 1\frac{1}{3} =$  \_\_\_\_\_

## 2 Place value

### Let's Learn!

Numbers are made up of digits. The **value** of each digit depends on its **place**. You can use a place value chart to find the place and value of each digit. For example, look at the chart for 4,862,915 below.

Millions		Hundred thousands	Ten thousands	Thousands		Hundreds	Tens	Ones
4	,	8	6	2	,	9	1	5

Circle the digit in the thousands place.

⑤,448

3,481,966

23,481

178,931

Circle the digit in the ten-thousands place.

228,384

6,484,281

2,234,725

48,276

Circle the digit in the hundred-thousands place.

7,285,395

948,285

164,481

2,528,947

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Name: \_\_\_\_\_

2-Digit Divisors, Single-Digit  
Quotients; Remainders

## Long Division



a.  $21 \overline{)130}$

b.  $36 \overline{)329}$

c.  $25 \overline{)204}$

d.  $70 \overline{)421}$

e.  $25 \overline{)225}$

f.  $42 \overline{)171}$

g.  $91 \overline{)551}$

h.  $23 \overline{)140}$

- i. Vikki works at a stuffed animal factory. She has 212 stuffed penguins and 53 boxes. Each box needs to have the same number of stuffed animals. How many penguins will she put in each box?

Show your work and label your answer.

\_\_\_\_\_

## Let's Learn!

When you add decimals, start by lining up the decimal points. Then add! Remember to bring down the decimal point into your answer.

$$\begin{array}{r} 8.41 \\ + 2.23 \\ \hline 10.64 \end{array}$$

Add.

$$\begin{array}{r} 1 \\ 4.85 \\ + 1.34 \\ \hline 6.19 \end{array}$$

$$\begin{array}{r} 47.6 \\ + 13.5 \\ \hline \end{array}$$

$$\begin{array}{r} 62.9 \\ + 8.3 \\ \hline \end{array}$$

$$\begin{array}{r} 29.36 \\ + 73.61 \\ \hline \end{array}$$

$$\begin{array}{r} 9.89 \\ + 0.57 \\ \hline \end{array}$$

$$\begin{array}{r} 16.71 \\ + 24.43 \\ \hline \end{array}$$

$$\begin{array}{r} 93.33 \\ + 52.47 \\ \hline \end{array}$$

$$\begin{array}{r} 60.72 \\ + 35.41 \\ \hline \end{array}$$

$$\begin{array}{r} 24.61 \\ + 77.38 \\ \hline \end{array}$$

$$\begin{array}{r} 120.17 \\ + 372.07 \\ \hline \end{array}$$

$$\begin{array}{r} 255.08 \\ + 95.35 \\ \hline \end{array}$$

Name: \_\_\_\_\_

4-Digit Dividends  
and 2-Digit Divisors

## Long Division



a.  $66 \overline{)4,281}$

b.  $20 \overline{)6,062}$

c.  $21 \overline{)5,805}$

d.  $27 \overline{)3,012}$

e.  $17 \overline{)3,016}$

f.  $11 \overline{)5,610}$

g.  $26 \overline{)6,442}$

h.  $12 \overline{)1,449}$

- i. Carly has a seashell collection. She has 1,596 shells in her collection. She stores the shells in special boxes, each of which has 12 compartments. She keeps one shell in each compartment. How many boxes does she use to store her seashell collection?

Show your work and label your answer.

\_\_\_\_\_

Name: \_\_\_\_\_

## Multiplication

a.  $465 \times 17 =$  \_\_\_\_\_

- b. A restaurant ordered 32 cases of ketchup packets. There are 225 packets in each case. How many ketchup packets did the restaurant order in all?

Show your work.

answer: \_\_\_\_\_

c.

$$\begin{array}{r} 739 \\ \times 86 \\ \hline \end{array}$$

- d. A cupcake factory produced 68 packages of chocolate cupcakes and 46 packages of vanilla cupcakes. There were 24 cupcakes in each package. How many cupcakes did the factory produce in all?

Show your work.

answer: \_\_\_\_\_

- e. Complete the table.

Input	Output
175	4,900
282	
390	10,920
497	

Rule: Multiply by 28.

## Let's Learn!

Dividing by a fraction is the same as multiplying by its reciprocal!

Try it with  $\frac{2}{5} \div \frac{1}{2}$ . Rewrite the division problem using multiplication.

Write the fraction  $\frac{1}{2}$  as its reciprocal,  $\frac{2}{1}$ . Then multiply across.

$$\frac{2}{5} \div \frac{1}{2} \rightarrow \frac{2}{5} \times \frac{2}{1} = \frac{4}{5}$$

When you divide by a whole number, that is also the same as multiplying by its reciprocal. Try it with  $\frac{3}{4} \div 5$ . Remember that the reciprocal of 5 is  $\frac{1}{5}$ .

$$\frac{3}{4} \div 5 \rightarrow \frac{3}{4} \times \frac{1}{5} = \frac{3}{20}$$

Divide. Write your answer as a proper fraction or mixed number in simplest form.

$$\frac{3}{4} \div \frac{2}{3} = \frac{3}{4} \times \frac{3}{2} = \frac{9}{8} = 1\frac{1}{8}$$

$$\frac{2}{5} \div \frac{1}{6} = \underline{\hspace{2cm}}$$

$$\frac{6}{7} \div 3 = \underline{\hspace{2cm}}$$

$$\frac{1}{4} \div \frac{8}{9} = \underline{\hspace{2cm}}$$

$$\frac{5}{8} \div \frac{1}{2} = \underline{\hspace{2cm}}$$

$$2 \div \frac{1}{3} = \underline{\hspace{2cm}}$$

$$\frac{9}{10} \div \frac{4}{5} = \underline{\hspace{2cm}}$$

$$\frac{11}{12} \div 4 = \underline{\hspace{2cm}}$$

Divide. Write your answer as a proper fraction or mixed number in simplest form.

$$\frac{2}{9} \div \frac{1}{3} = \underline{\hspace{2cm}}$$

$$\frac{1}{2} \div \frac{5}{7} = \underline{\hspace{2cm}}$$

$$4 \div \frac{3}{4} = \underline{\hspace{2cm}}$$

$$\frac{5}{6} \div \frac{1}{4} = \underline{\hspace{2cm}}$$

$$\frac{3}{7} \div \frac{1}{5} = \underline{\hspace{2cm}}$$

$$\frac{8}{9} \div 5 = \underline{\hspace{2cm}}$$

$$8 \div \frac{2}{3} = \underline{\hspace{2cm}}$$

$$\frac{3}{10} \div \frac{1}{4} = \underline{\hspace{2cm}}$$

$$\frac{3}{5} \div \frac{2}{7} = \underline{\hspace{2cm}}$$

$$\frac{4}{9} \div \frac{2}{5} = \underline{\hspace{2cm}}$$

**CHECK IT  
OUT!**

Go back to pages 135 and 136. Try solving the problems using a reciprocal. The answers should be the same!

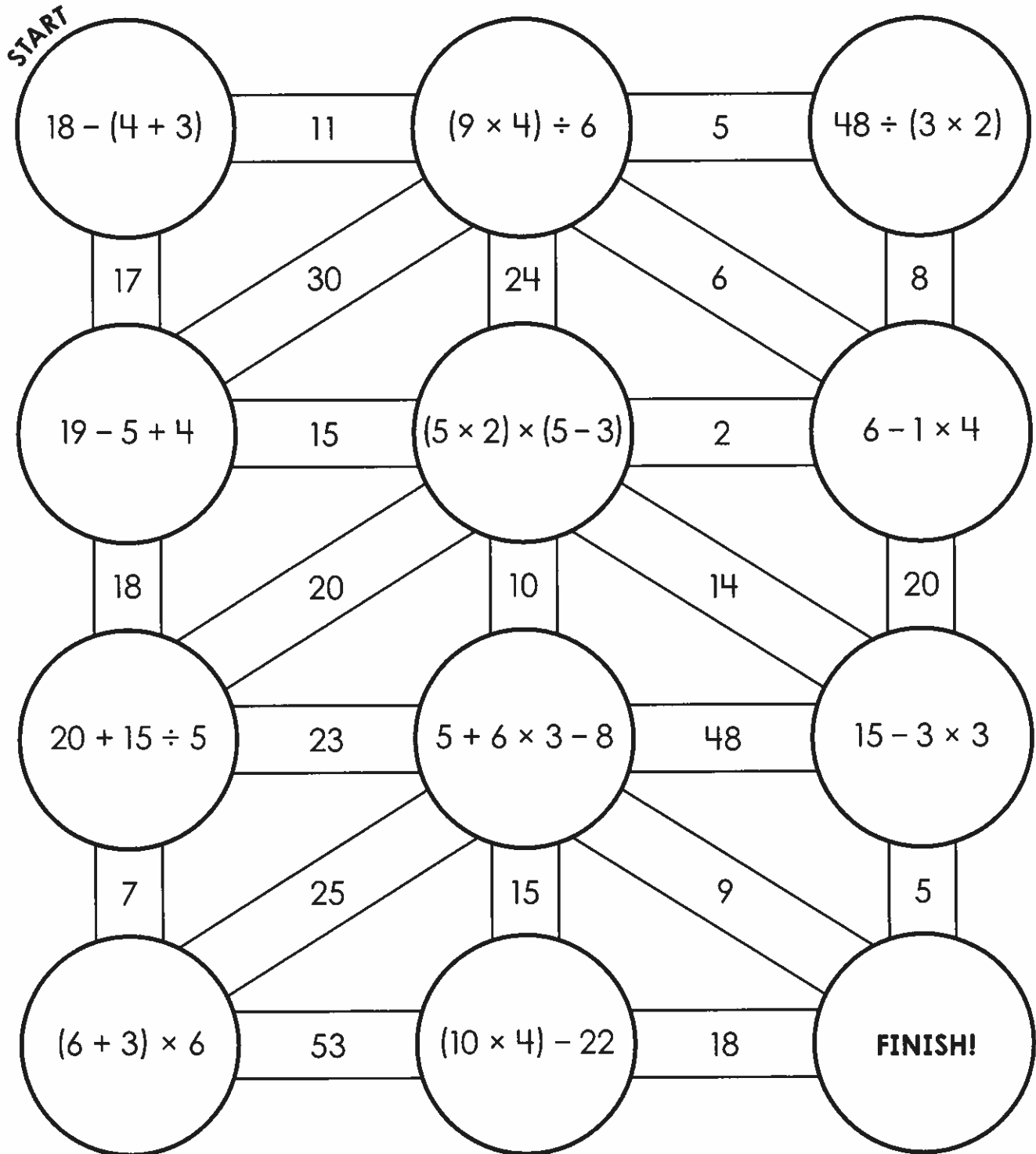


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Name: \_\_\_\_\_

# Order of Operations Maze

Find your way through the maze by using the order of operations to solve each equation. Color the equation bubbles and the correct solutions as you work to reveal the path from **start** to **finish**.



Name: \_\_\_\_\_

## Multiplying Fractions and Mixed Numbers

Find each product. Write your answer in simplest form.

a.  $\frac{1}{8} \times \frac{2}{3}$

b.  $\frac{3}{5} \times \frac{10}{21}$

c.  $\frac{4}{5} \times \frac{3}{8}$

d.  $\frac{4}{5} \times 3$

e.  $\frac{8}{9} \times 1\frac{1}{4}$

f.  $\frac{1}{8} \times 4\frac{2}{3}$

g.  $5\frac{1}{3} \times 2\frac{1}{4}$

h.  $20 \times 3\frac{1}{5}$

i.  $\frac{1}{4} \times 9\frac{1}{2}$

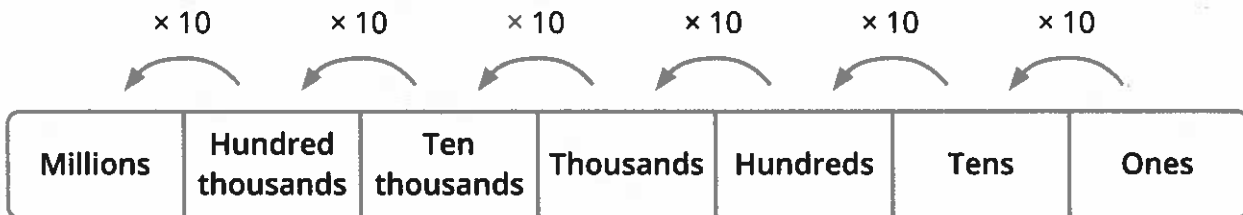
j.  $2\frac{1}{3} \times 2\frac{1}{3}$

k.  $5\frac{1}{5} \times \frac{1}{2}$

l.  $3\frac{1}{2} \times 1\frac{2}{7}$

## Let's Learn!

The places in a number are related to each other. Each place is 10 times as much as the place to its right.



You can use this pattern to find the relationship between different numbers. Look at the examples below.

3,000 is 10 times as much as 300.

500 is 10 times as much as 50.



Use the place value pattern to fill in the missing numbers.

80,000 is 10 times as much as 8,000.

400 is 10 times as much as \_\_\_\_\_.

\_\_\_\_\_ is 10 times as much as 500.

2,000,000 is 10 times as much as \_\_\_\_\_.

\_\_\_\_\_ is 10 times as much as 7.

300,000 is 10 times as much as \_\_\_\_\_.





# 6TH GRADE SUMMER READING 2026

## READ 2 NOVELS

Incoming sixth grade students will read 2 novels:

- Hatchet* by Gary Paulsen
- Choice Novel



### *Hatchet* Project

Students will read *Hatchet* by Gary Paulsen and answer questions about important parts of the story, like the characters, setting, plot, and themes.

While reading, students can begin creating a fun three-dimensional project that shows their understanding of the novel and connects to their written responses.

This is a chance to be creative, think outside the box, and bring the story to life in your own unique way!



### Choice Novel Annotations

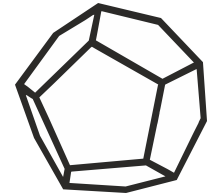
Students should choose an age-appropriate novel together with their parents. Local libraries and bookstores are great places to explore and find a book.

As students read, they should annotate the text by using sticky notes to write down thoughts, questions, or important ideas, or by highlighting important parts if they own the book.

Look for things like similes, metaphors, personification, conflict, setting, and characterization as you read.



# Hatchet Project Craft



Name: \_\_\_\_\_

Since 1986, readers from around the world have been captivated by the wilderness survival novel, *Hatchet*, written by Gary Paulsen. Whether it is the intriguing plot, the dynamic character development, or the unforgettable resolution, there is so much to love about this novel. For this project, you will complete 12 activities related to *Hatchet* and construct a 12-sided polyhedron called a dodecahedron to showcase your learning. Have fun!

## Procedure:

**Step 1: Research & Communicate** - For each pentagon, read the instructions carefully and complete the activity. Using the Internet and books, conduct research to help you satisfy the criteria for each activity (See **Research Notes** page). Through writing and drawing pictures, use the space within each pentagon to communicate your learning.

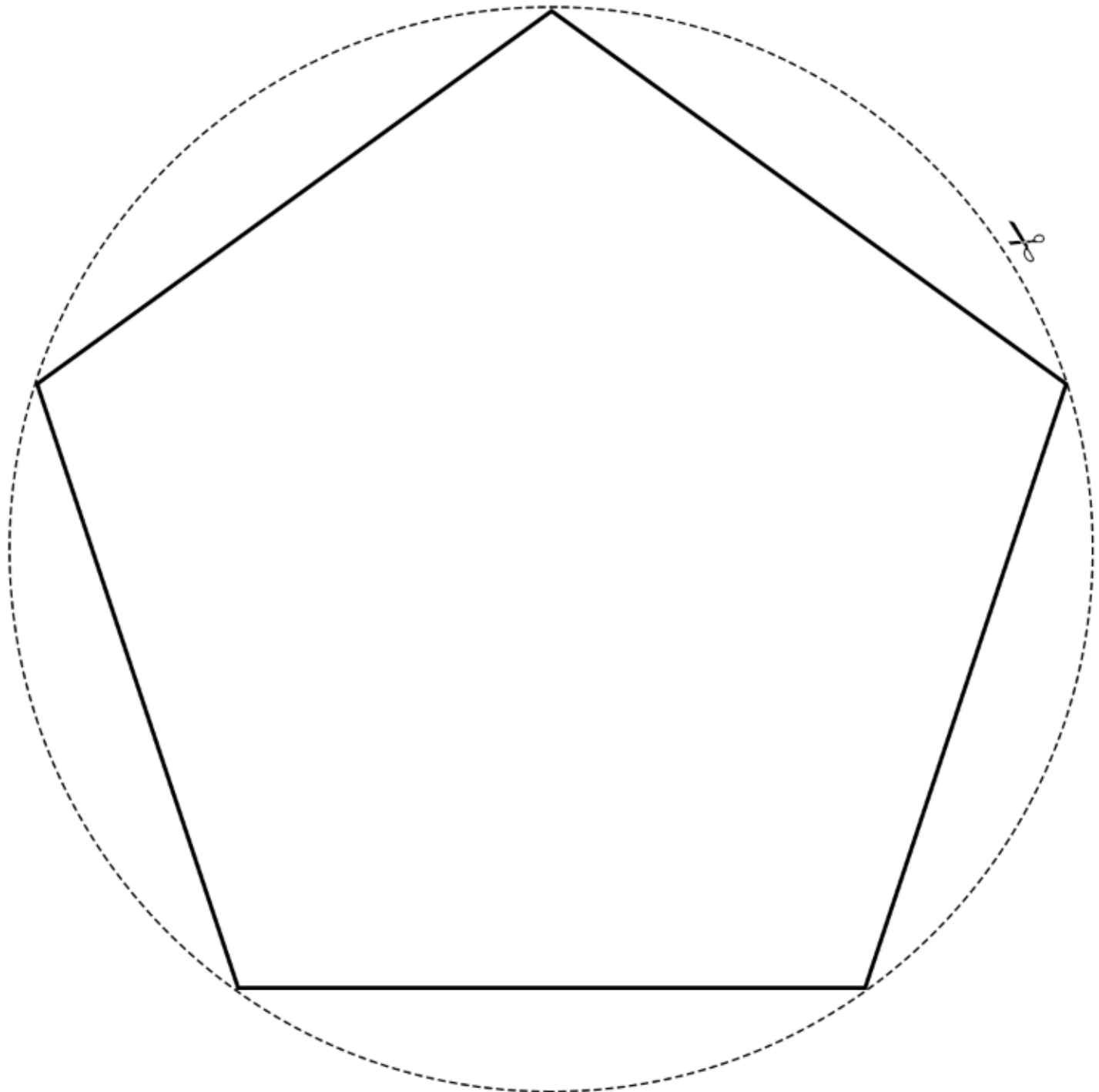
**Step 2: Decorate** - When coloring your pentagons, consider how the dodecahedron will appear once the pentagons are placed together. Choose colors that compliment each other well and that relate to your topic. Using pencil crayons and markers, color all of your artwork and even the backgrounds of your pentagons. Using a black fine-liner, fine-line your writing and erase all pencil marks.

**Step 3: Construct** - Now you are ready for construction! Create your dodecahedron by following the instructions on the **Dodecahedron Construction** page.

# *Pentagon #1*

## Title Page

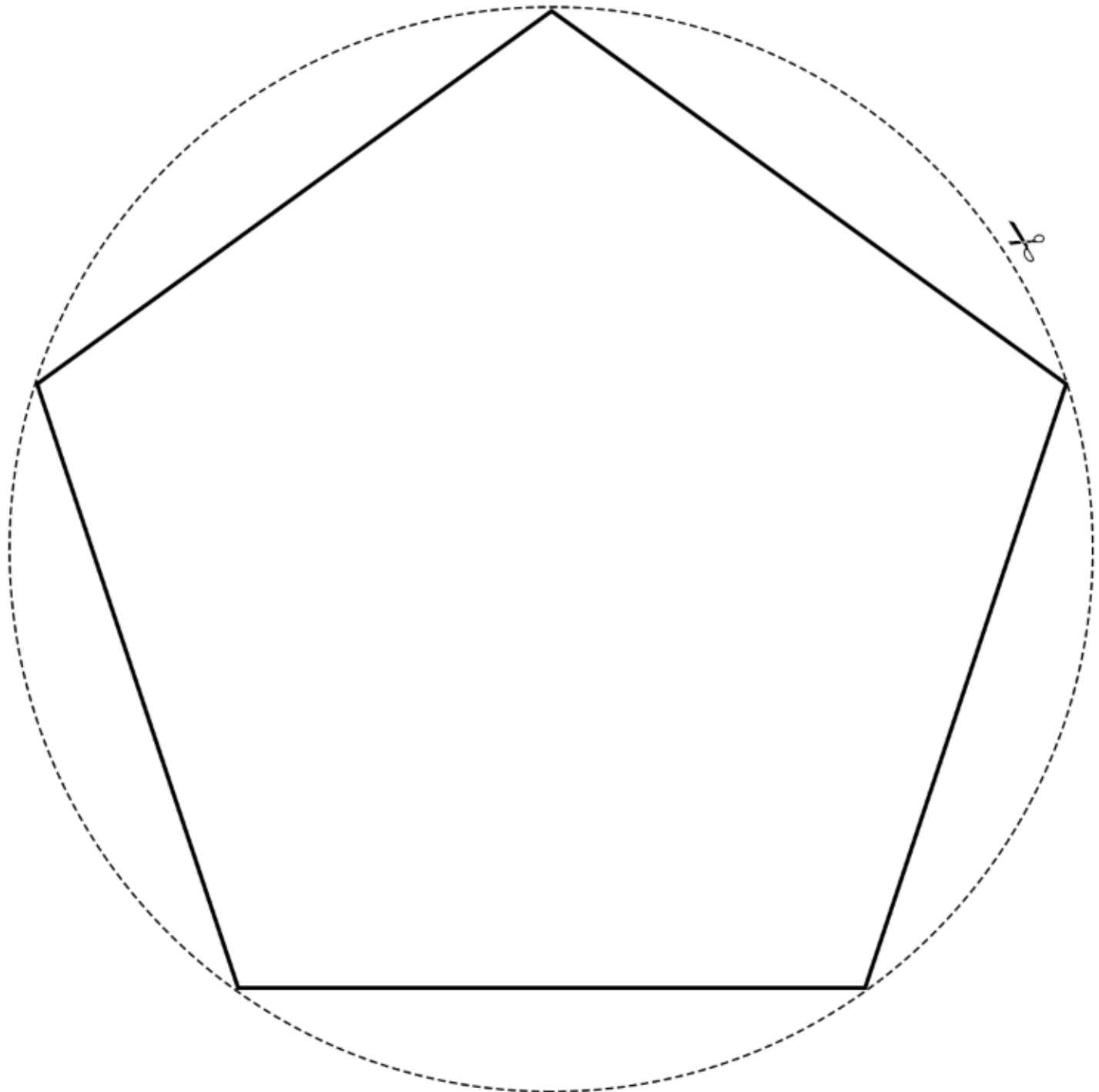
For the first activity, write the title of the project on this pentagon. Plan the lettering to use up the entire space. Be as bold, colorful, and attractive as possible. You may choose to include a picture to further captivate your viewers. Remember, it is the title page of your project, so it needs to be memorable.



# Pentagon #2

## Brian Robeson

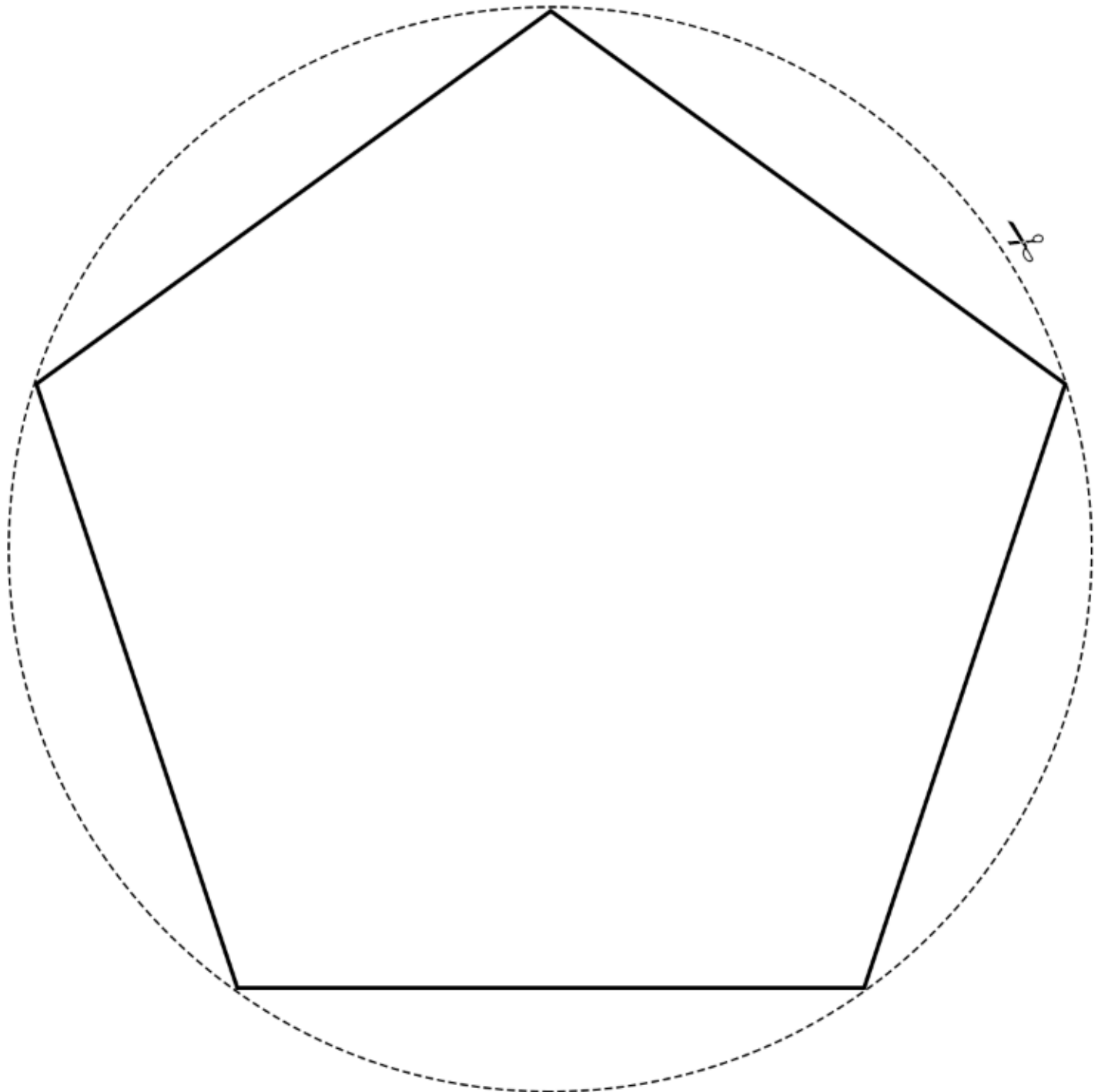
For this activity, research Brian and show your learning in the pentagon below. Use the following questions to help guide you: 1) Describe Brian's appearance, personality, and abilities. 2) Who are his friends and enemies? 3) Describe the most important events of his life. Challenge: How many days did Brian survive in the wilderness?



# Pentagon #3

## Airplane Pilot

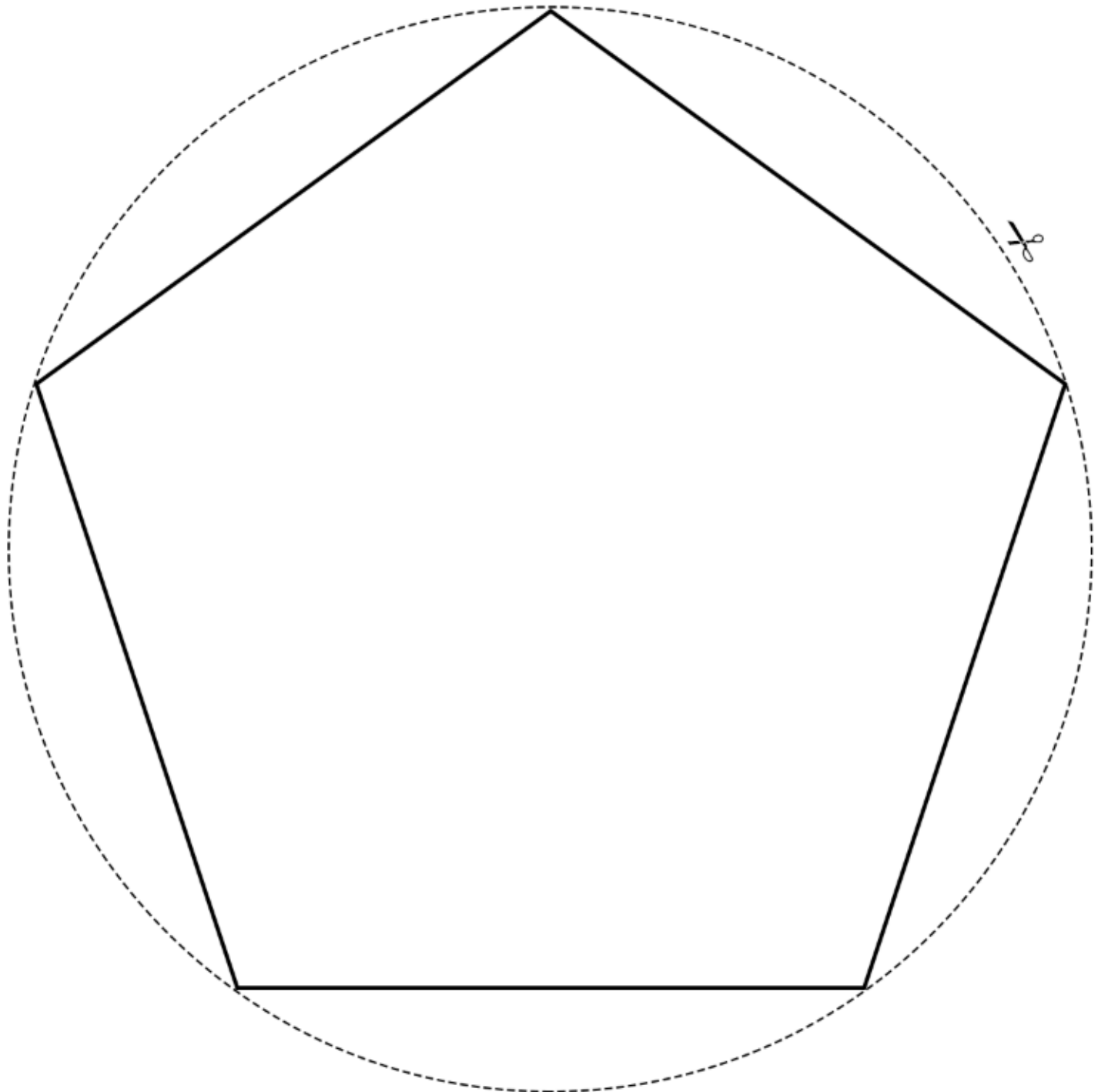
For this activity, research the airplane pilot and show your learning in the pentagon below. Use the following questions to help guide you: 1) Describe the pilot's appearance, personality, and abilities. 2) How old is he? 3) What kind of airplane does he fly? Challenge: What does the pilot teach Brian about flying an airplane?



# Pentagon #4

## Brian's Mother

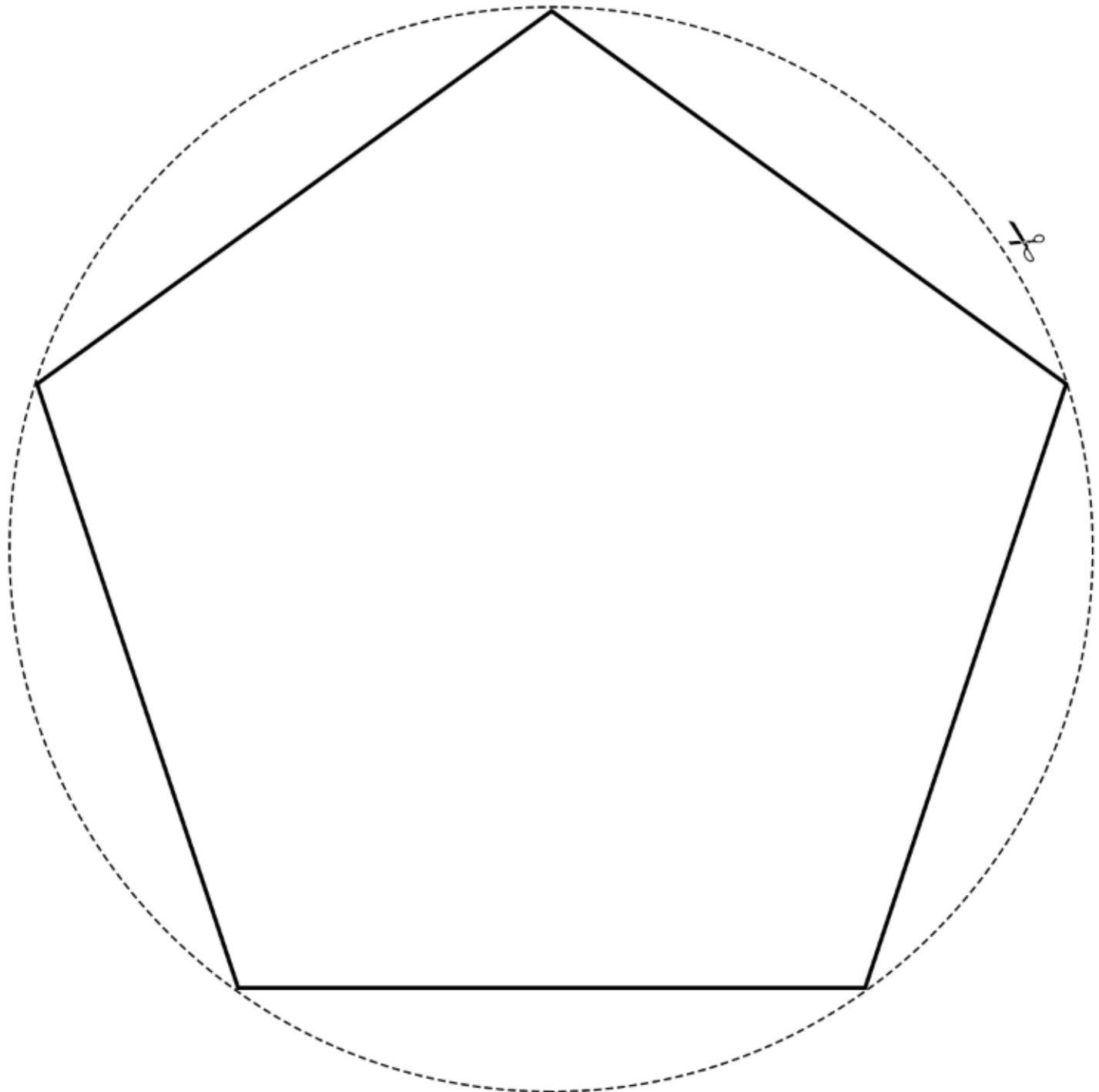
For this activity, research Brian's mother and show your learning in the pentagon below. Use the following questions to help guide you: 1) Describe Brian's mother's appearance, and personality. 2) Why does she want to divorce Brian's father? 3) How would you describe Brian and his mother's relationship? Challenge: Why do you think Brian's mother chooses to give him a hatchet?



# Pentagon #5

## Brian's Father

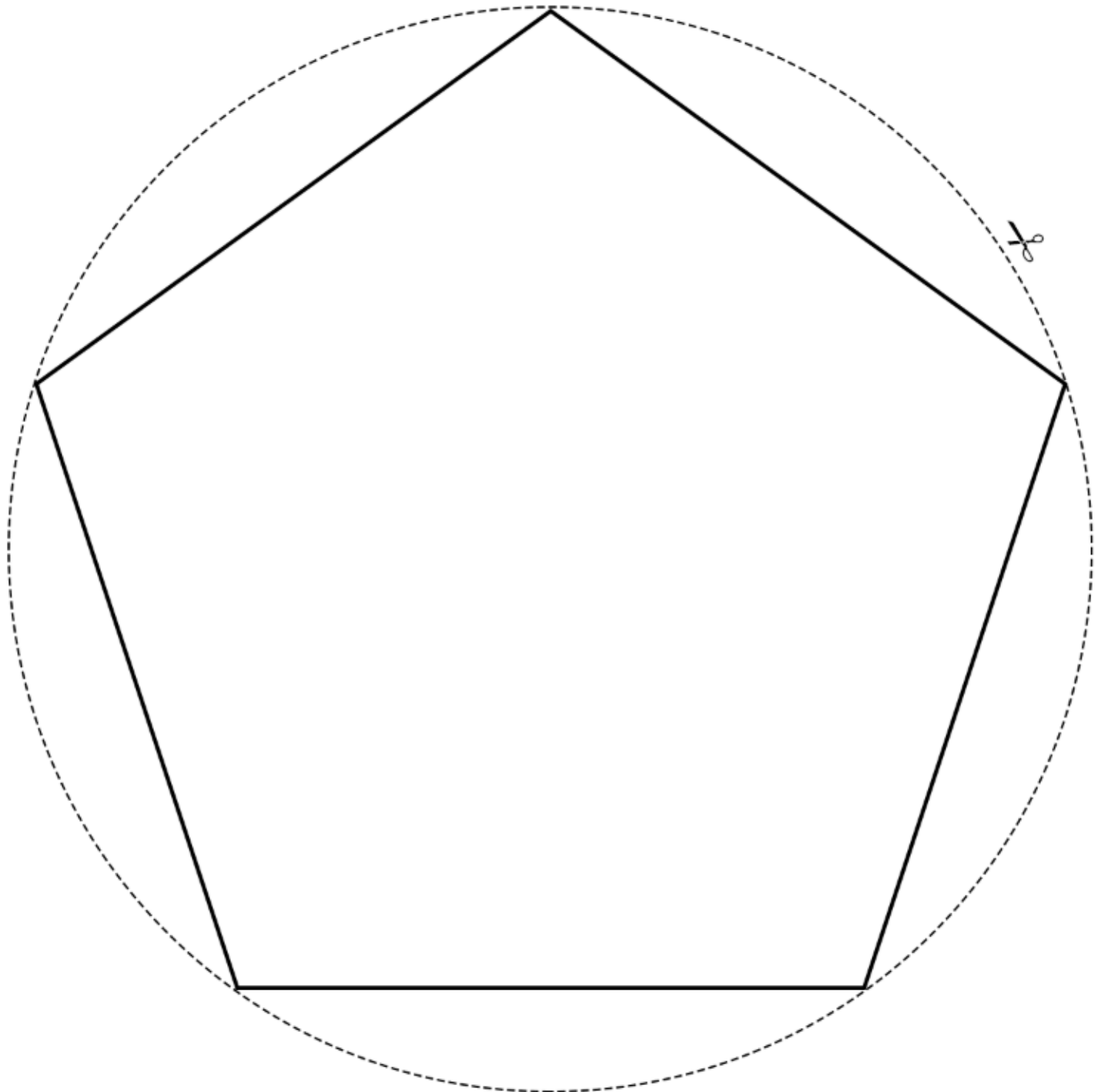
For this activity, research Brian's father and show your learning in the pentagon below. Use the following questions to help guide you: 1) Describe Brian's father's appearance, personality, and interests. 2) How does he feel about Brian's mother wanting a divorce? 3) Where is Brian's father currently living? Why? Challenge: During a dream, what does Brian's father help him make?



# Pentagon #6

## Mr. Perpich

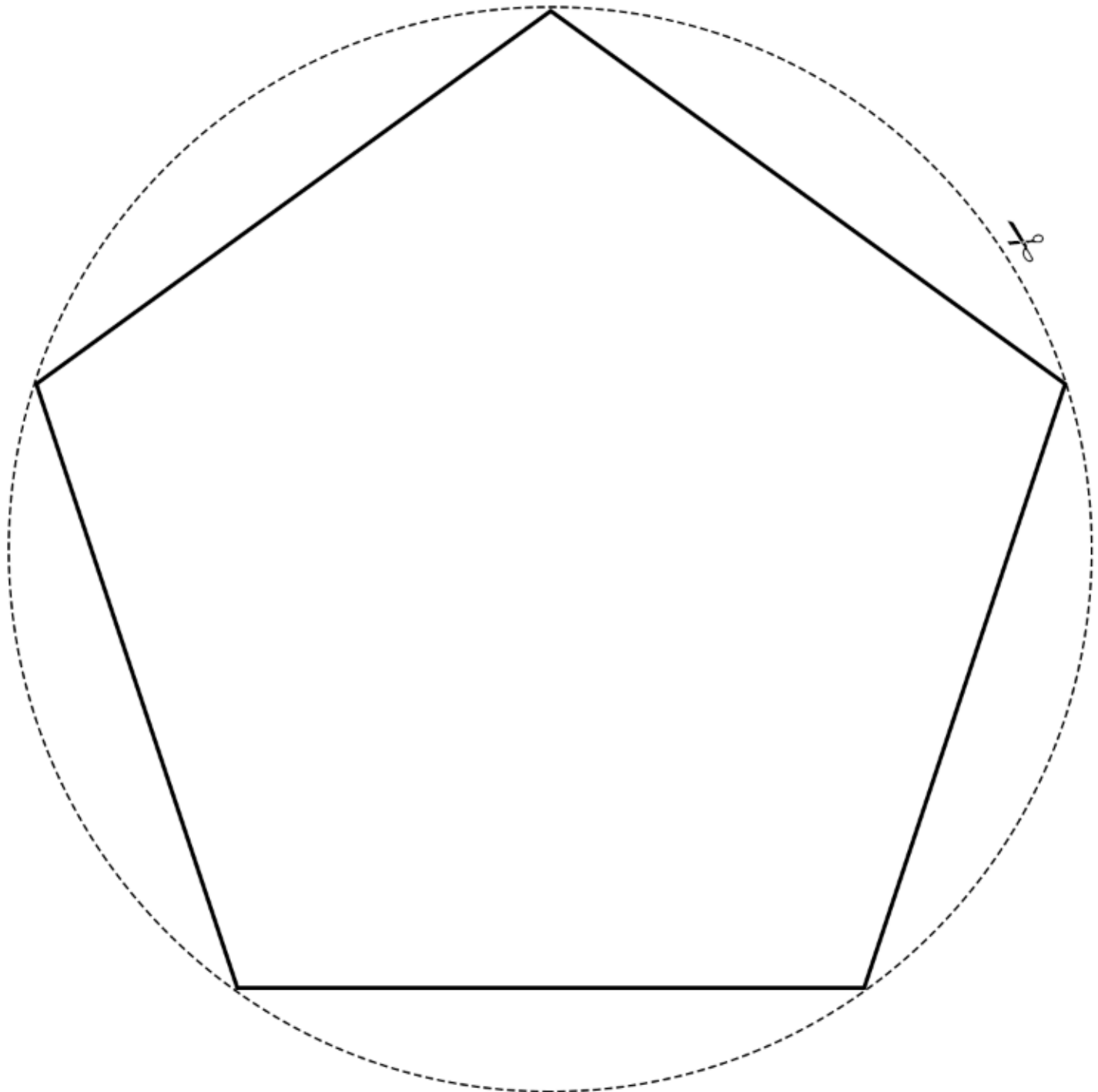
For this activity, research Mr. Perpich and show your learning in the pentagon below. Use the following questions to help guide you: 1) Who is Mr. Perpich? 2) What lesson did Mr. Perpich continually teach Brian? 3) How does this lesson help Brian survive in the wilderness? Challenges: Without Mr. Perpich's teachings, how long do you think Brian would have survived?



# Pentagon #7

## Terry

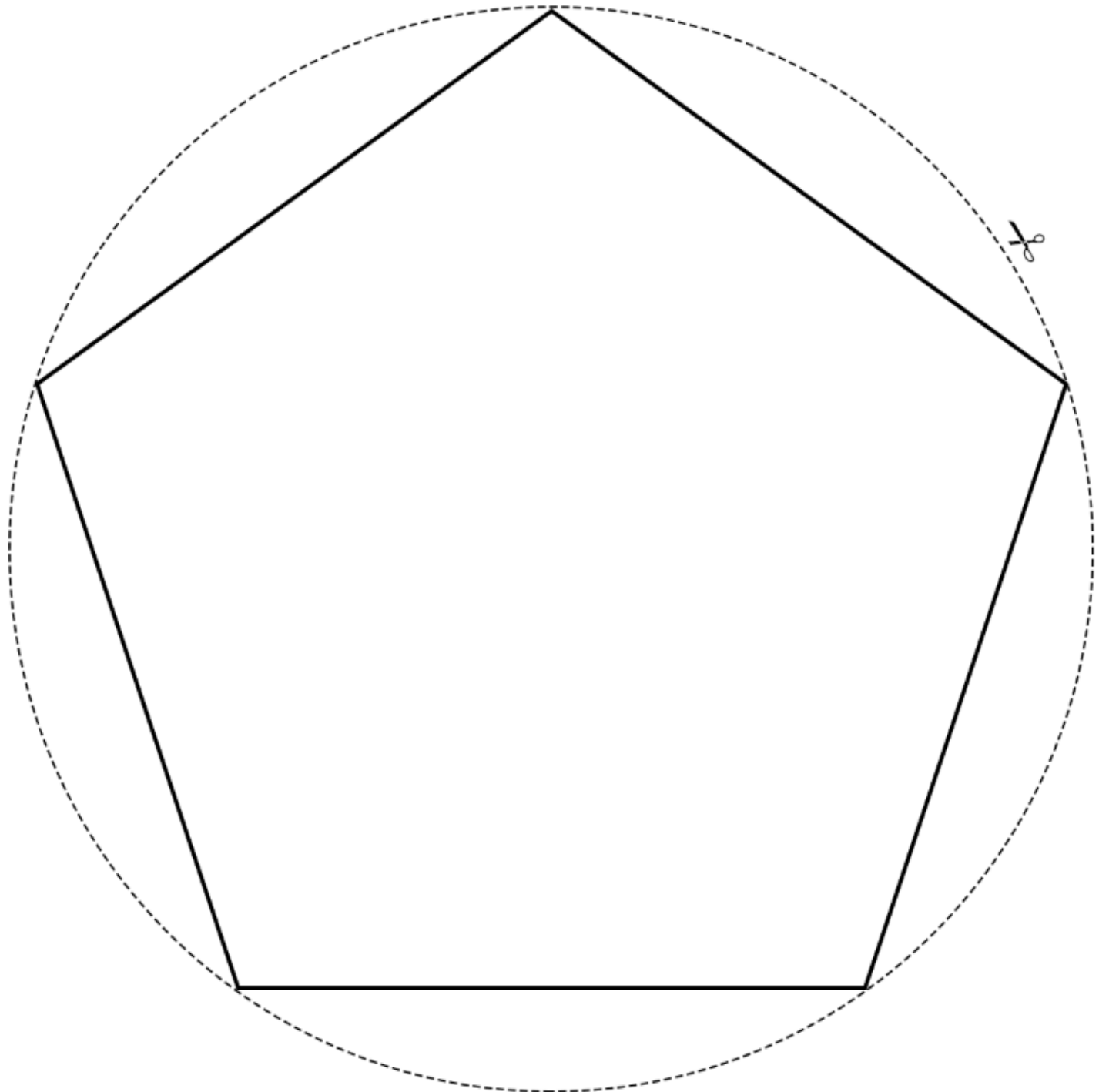
For this activity, research Terry and show your learning in the pentagon below. Use the following questions to help guide you: 1) Who is Terry? 2) What was Terry doing when Brian saw his mother kiss the strange man? 3) How does Terry help Brian survive in the wilderness? Challenge: In which chapter does Terry appear in Brian's dream?



# Pentagon #8

## The Hatchet

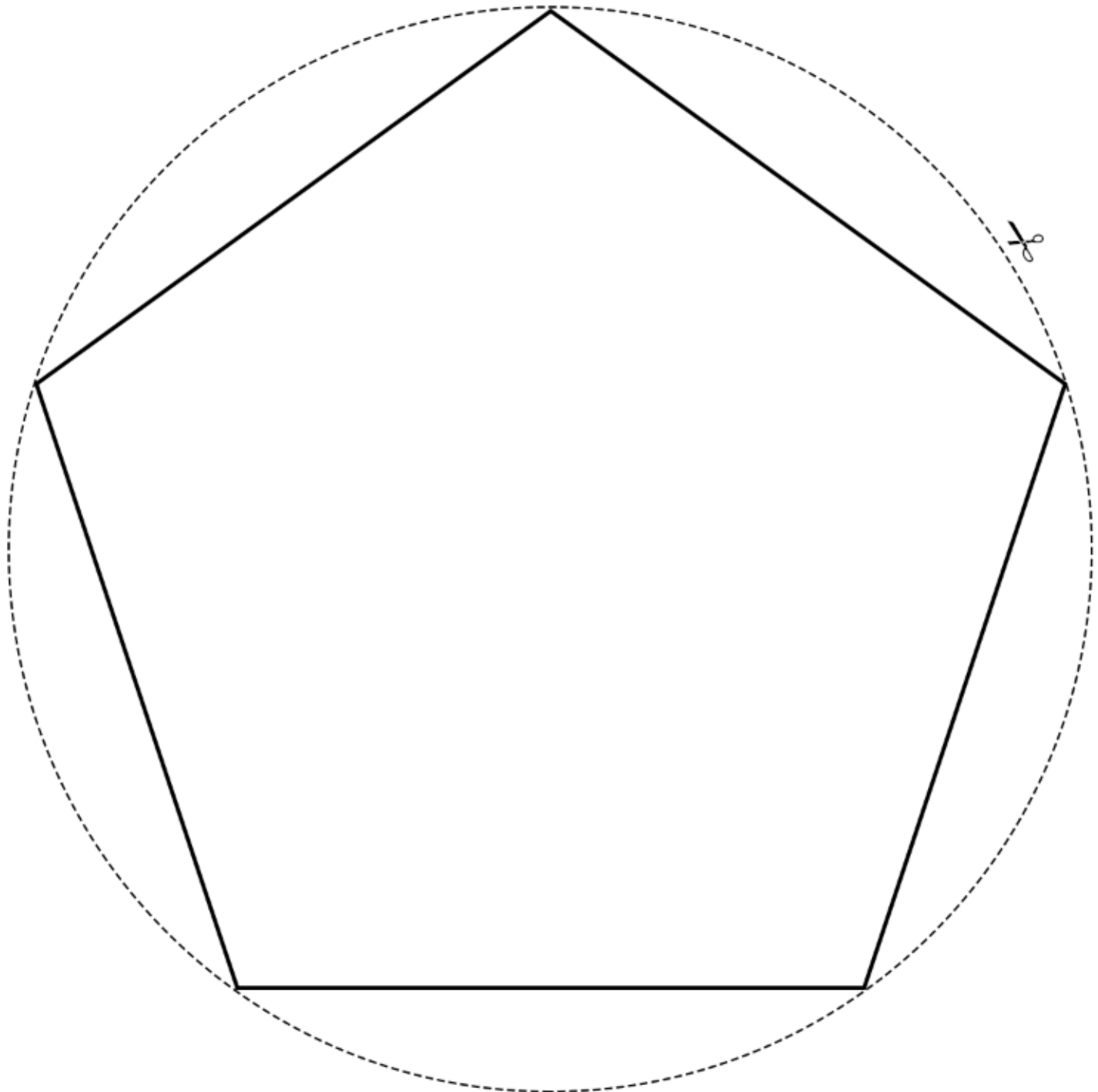
For this activity, research the hatchet and show your learning in the pentagon below. Use the following questions to help guide you: 1) How does Brian feel about the hatchet when his mother first gives it to him? Why do you think he feels this way? 2) How does Brian feel about the hatchet toward the end of the novel? Why? Challenges: 1) How does the hatchet represent Brian's relationship with nature? 2) Could he have survived without it?



# Pentagon #9

## The Wilderness

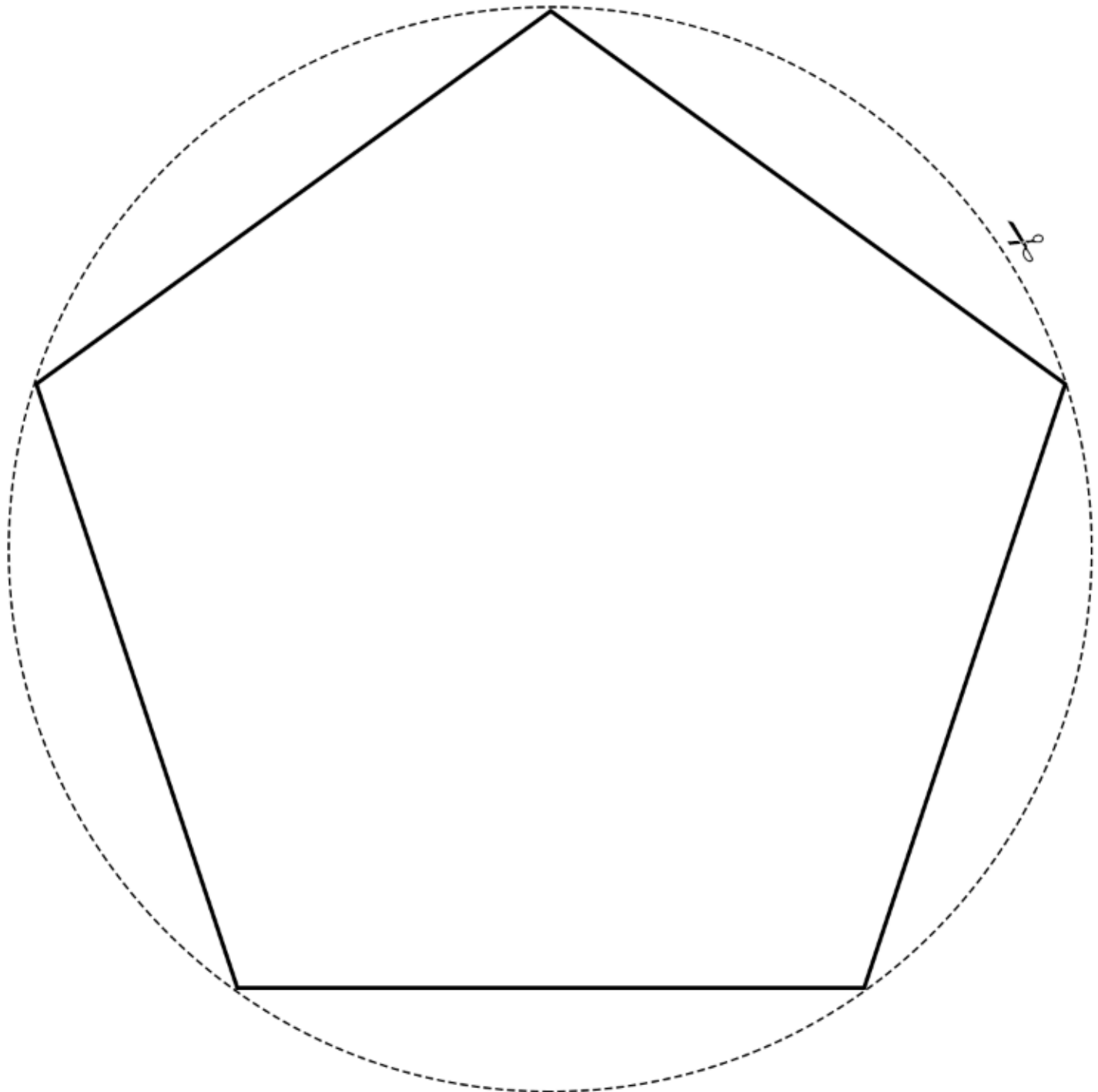
For this activity, research the wilderness and show your learning in the pentagon below. Use the following questions to help guide you: 1) How does Brian's relationship with the wilderness change throughout the novel? 2) How does Brian's relationship with the animals change throughout the novel? Challenge: How does the wilderness test Brian's strength, resolve and patience?



# Pentagon #10

## Survival

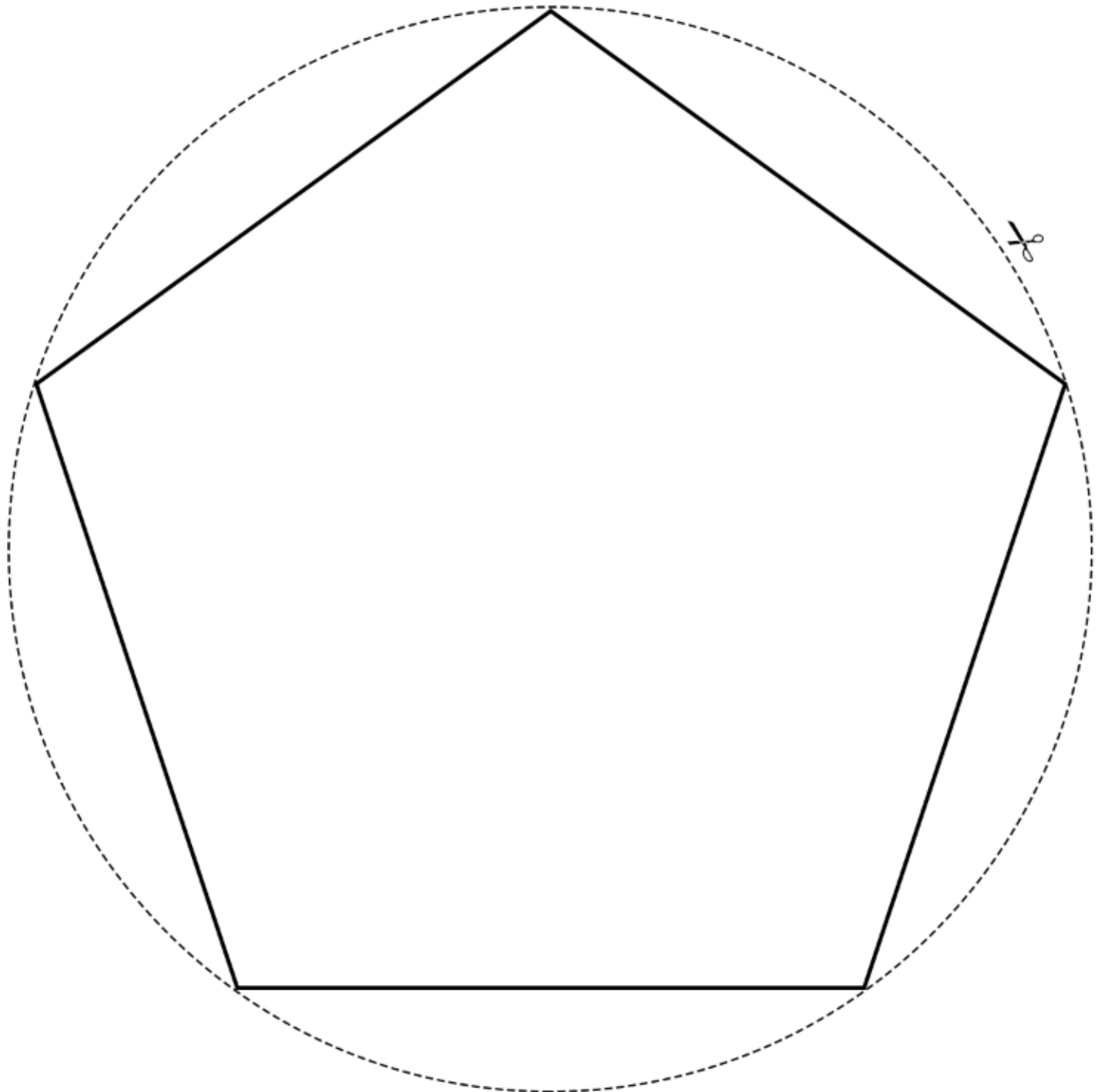
For this activity, research how Brian survived and show your learning in the pentagon below. Use the following questions to help guide you: 1) What did Brian do to find food in the wilderness? 2) How did Brian create a shelter? 3) What important tools/items did Brian have to help him survive? Challenge: Do you think Brian would have survived the winter? Why or why not?



# Pentagon #11

## Rescue

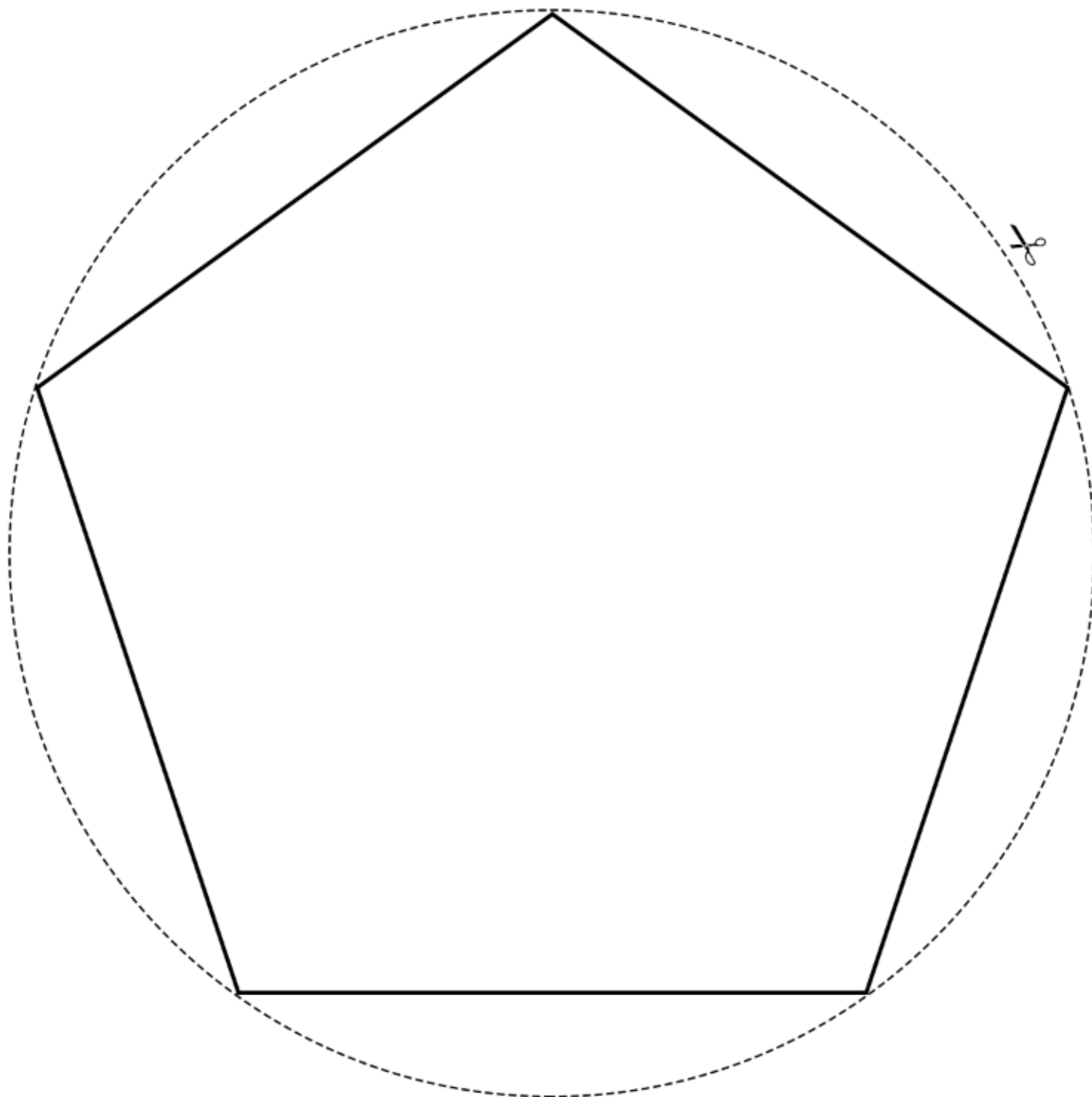
For this activity, research Brian's rescue and show your learning in the pentagon below. Use the following questions to help guide you: 1) What were the events that led up to Brian's rescue? 2) What item did Brian find that led to his rescue? 3) Who rescued Brian? Challenge: Describe how Brian feels the moment he realizes that he will be rescued.



# *Pentagon #12*

## Reference List

For the final activity of this project, use the space within the pentagon below to create a Reference List. Refer to the Reference List Instructions page to learn about what a Reference List is, and how to properly reference sources such as books, magazines, newspaper articles, websites, and webpages.



# Dodecahedron Construction

## Materials:

- scissors
- string
- glue stick
- paperclip

## Procedure:

Step 1: Using scissors, cut out all 12 pentagons, including the tabs.

Step 2: Carefully fold the tabs onto the back of each pentagon, scoring the edges (see photo 1).

Step 3: Attach two pentagons together by gluing the tabs (see photo 2).

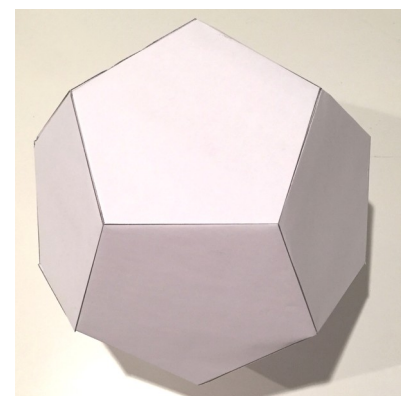
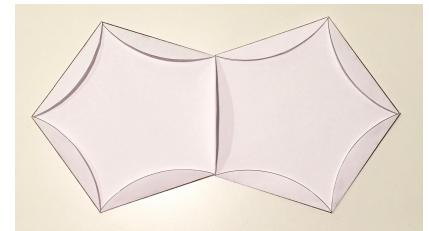
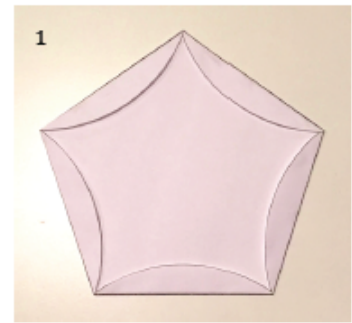
Step 4: Add a third pentagon to the others by gluing two of the tabs (see photo 3). This creates the base of the dodecahedron.

Step 5: Continue to attach pentagons around the base pentagon to make the bottom half of the dodecahedron (see photo 4).

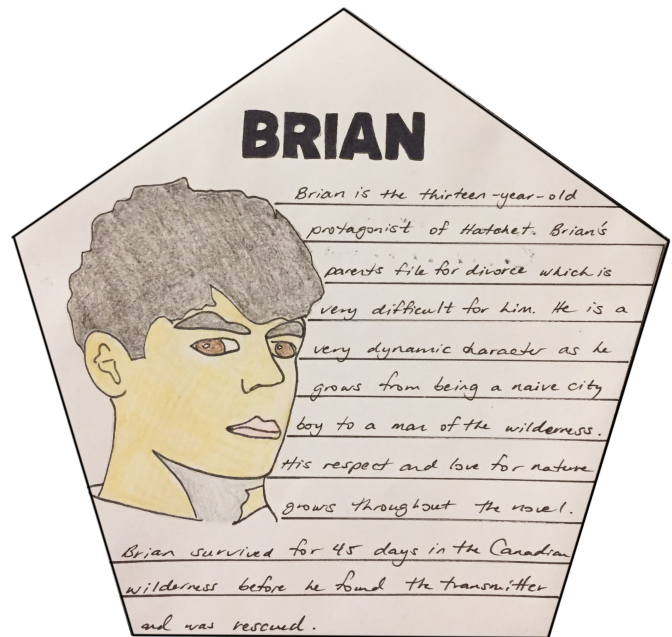
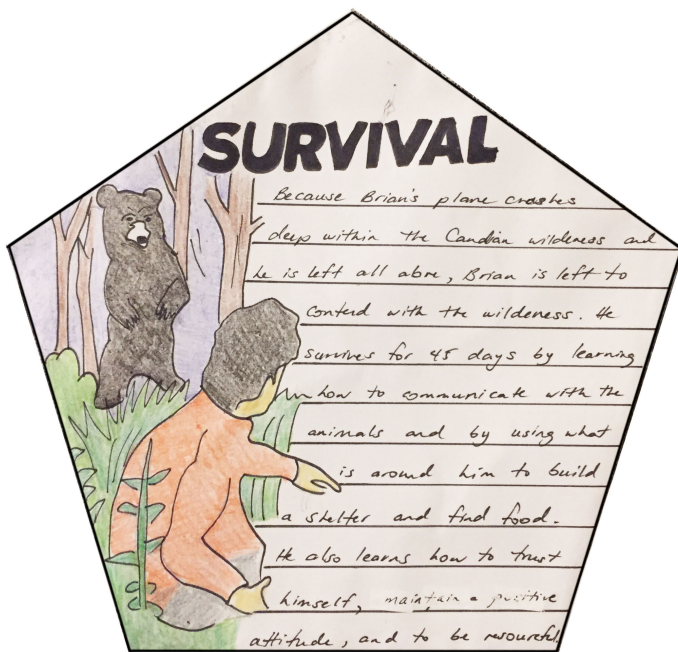
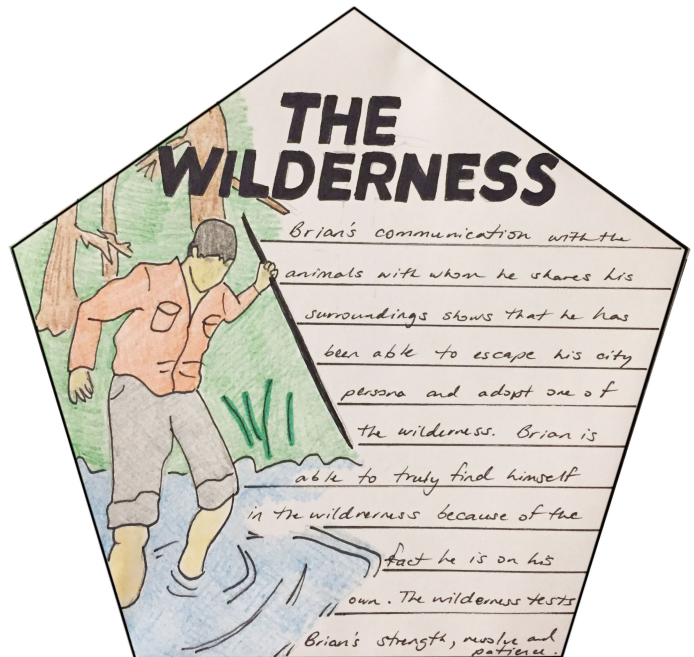
Step 6: Repeat steps 3-5 to create the top half and glue the two halves together (see photo 5).

Step 7: To create a hanging device, tie a piece of string to a paperclip and slide the paperclip between any two panels near a vertex. To secure the string in place, apply liquid glue to the area and let it dry.

**Alternative Appearance:** For a different look, some people prefer to have the tabs on the exterior of the dodecahedron.



# Project Examples



# Project Rubric

Project Title: \_\_\_\_\_

Name: \_\_\_\_\_

Aspect	Not Yet Within Expectations	Minimally Meets Expectations	Fully Meets Expectations	Exceeds Expectations
<b>Snapshot</b>	<i>The project does not complete the basic requirements; presents inaccurate or incomplete information, with limited depth of analysis. Frequent errors in conventions.</i>	<i>The project completes basic requirements; may be vague and unfocused in places, or omit key information. Some errors in conventions.</i>	<i>The project completes most requirements; includes enough accurate, relevant, and detailed information with a considerable depth of analysis. Few errors.</i>	<i>The project completes all requirements; uses accurate, relevant, and detailed information to provide a thorough analysis; Communicates effectively.</i>
<b>Required Elements</b> <ul style="list-style-type: none"> <li>project criteria</li> <li>text features: titles, headings, diagrams, illustrations</li> </ul>	<ul style="list-style-type: none"> <li>project does not complete basic requirements</li> <li>text features are omitted or inappropriate</li> </ul>	<ul style="list-style-type: none"> <li>project completes basic requirements; may omit key information</li> <li>text features are included; may be flawed</li> </ul>	<ul style="list-style-type: none"> <li>project completes most requirements</li> <li>required text features are included and correctly constructed</li> </ul>	<ul style="list-style-type: none"> <li>project completes all requirements</li> <li>required text features are clear, effective, and well constructed</li> </ul>
<b>Analysis</b> <ul style="list-style-type: none"> <li>accuracy</li> <li>depth</li> <li>details</li> </ul>	<ul style="list-style-type: none"> <li>information is inaccurate, incomplete, or copied</li> <li>limited depth of analysis</li> <li>few details provided</li> </ul>	<ul style="list-style-type: none"> <li>information is generally accurate</li> <li>some depth of analysis</li> <li>includes details and examples; some may be irrelevant or inaccurate</li> </ul>	<ul style="list-style-type: none"> <li>information is mostly accurate, complete, and in own words</li> <li>considerable depth of analysis</li> <li>relevant details and examples</li> </ul>	<ul style="list-style-type: none"> <li>information is accurate, thorough, and in own words; uses multiple sources</li> <li>thorough depth of analysis</li> <li>specific, relevant details and examples</li> </ul>
<b>Conventions</b> <ul style="list-style-type: none"> <li>spelling, punctuation, complete sentences, grammar</li> </ul>	<ul style="list-style-type: none"> <li>frequent errors interfere with meaning</li> </ul>	<ul style="list-style-type: none"> <li>some noticeable errors; these may cause the reader to hesitate or reread parts to confirm meaning</li> </ul>	<ul style="list-style-type: none"> <li>few errors that do not interfere with meaning</li> </ul>	<ul style="list-style-type: none"> <li>very few errors; these are usually the result of taking risks to use complex language and structures</li> </ul>
<b>Visual Display</b> <ul style="list-style-type: none"> <li>layout &amp; design</li> <li>neatness</li> </ul>	<ul style="list-style-type: none"> <li>ineffective layout and unappealing design</li> <li>project is untidy, unorganized and difficult to read</li> </ul>	<ul style="list-style-type: none"> <li>somewhat effective layout and design</li> <li>project is somewhat organized</li> </ul>	<ul style="list-style-type: none"> <li>mostly effective layout and design</li> <li>project is neat and mostly organized</li> </ul>	<ul style="list-style-type: none"> <li>effective layout and visually-appealing design</li> <li>project is very neat and organized</li> </ul>