

Angle Origami

Student handout

Instructions: complete this handout to document your thinking and solutions as you work through this lesson / unit.

Introduction

Use the following space to identify what you will be learning through this activity. Make sure you are clear about what you want or intend to learn.

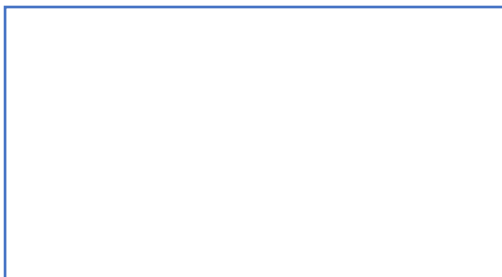
Write your response here

Step one: fold your paper

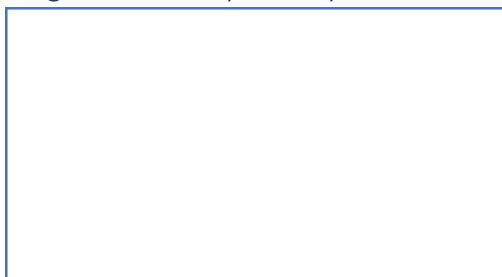
Vocabulary words.

Capture your definitions for the following terms. You can use a diagram to explain your definition if you like.

Vertical line of symmetry:



Diagonal line of symmetry:



Follow the steps outlined and then take a photo of your paper once you are finished.

Insert your photo here or send separately to your teacher



Step two: find the angles – complete the following table

Type of angle	Magnitude (size)	Number (how many are there?)

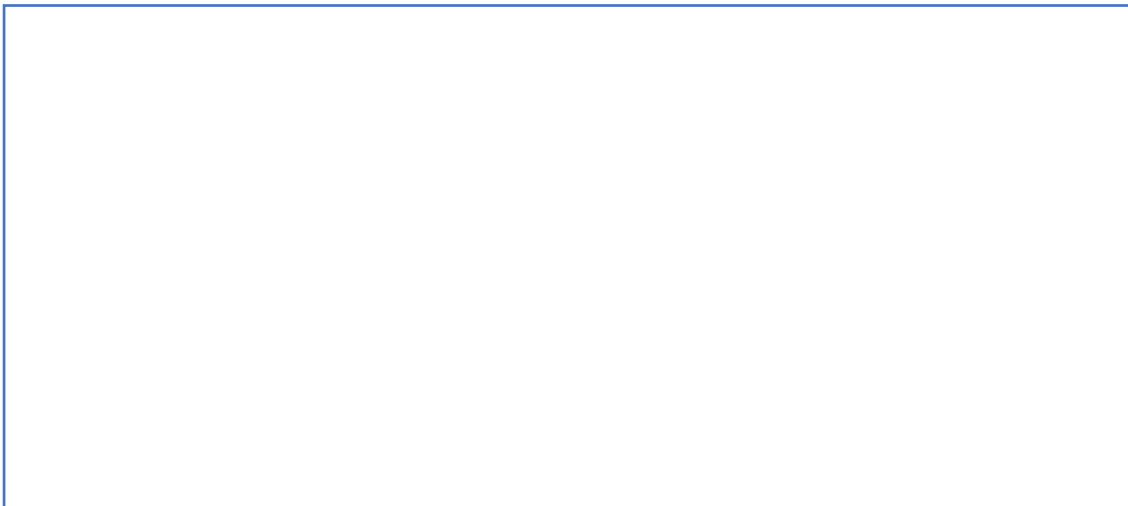
Angle facts I know (write any that you already knew and others that you have learnt from others):

Question posing and answering

Identify three MATHEMATICAL questions that you can ask about your folded piece of paper



What questions were you able to answer from other students?



Step three: a focus on shapes

How many different types of shapes are you able to identify on your folded paper? Fill in the table below to document this.

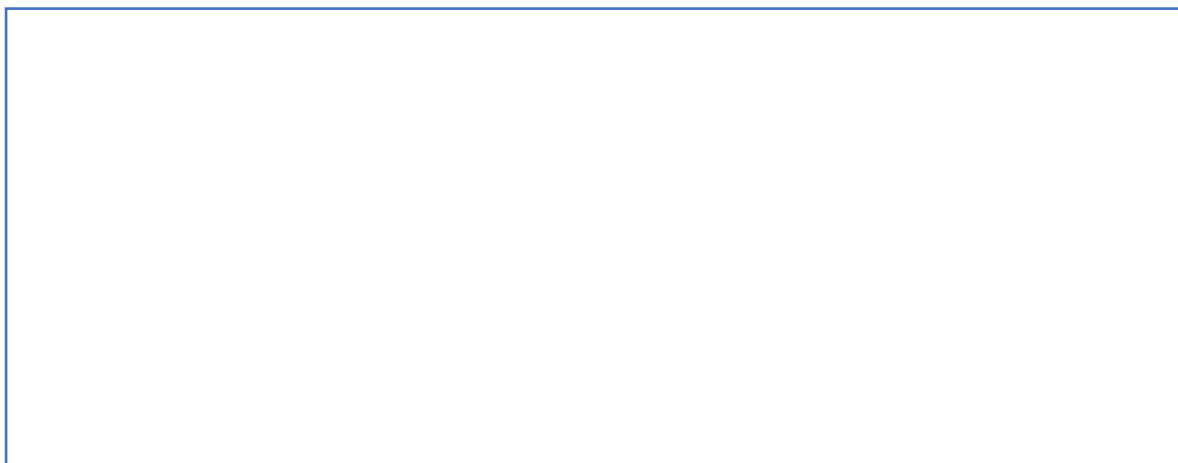
You may need to look up or ask someone what is meant by the term “internal angle sum” first.

Shape type	How many?	Are they all the same size?	Internal angle sum?	Are the internal angle sums all the same?

How do you know that you have found all of the shapes? Who have you checked with?

Can you add another fold to your paper that increases the number of types of shapes that it contains?

Draw a diagram or take a photo of how you might do this.



Origami folding

Try some of the origami tasks and document your attempts here.

Reflection

Review the learning intentions from the beginning of the task and identify which ones you believe you met from doing this task.

Outline three things that you learned from the task or found interesting.

Outline the key strategies that you used to complete the task. Did you COLLABORATE with your classmates? If you did (and you should have) how did this collaboration support your learning?

What is one question that you have about what you might learn next about shapes and angles?