

# Math PBL

## Make a 2D Alien Toy



### The Task:

To design an alien toy using a range of 2D shapes

Included Concepts:  
- Perimeter and Area  
- Name, label and create a range of 2D shapes



### Requirements:

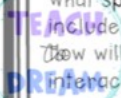
You will need to design an alien toy using 2D shapes.

The Alien will need to consist of a range of 2D shapes. This may include; square, rectangle, triangle, circle, rhombus, semi-circle, trapezium and other regular polygons.

What will your alien look like?

What special design features will you include?

How will you make your toy move/interactive? (split pins, paper springs,

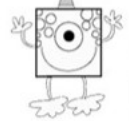


## Real World Mini Math Project



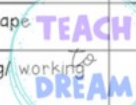
### Steps to Take:

1. Sketch out a design for your alien.
2. Check that you are including a range of 2D shapes.
3. Use a ruler or graph paper to draw each shape carefully.
4. Label the name of each shape used.
5. Record the perimeter and area of each shape.
6. Decorate your final product.
7. Share your alien with the class.



### Assessment:

Can accurately record the name of 2D shapes	/5
Can successfully draw a range of 2D shapes	/5
Can work out the perimeter of each 2D shape	/5
Can record the area of each 2D shape	/5
Clearly shows mathematical thinking/working out	/5
Comment:	/20



# Students Will Love!

# Detailed Student Outline with Concepts & Steps Covered

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to  
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## Make a 2D Alien Toy



### The Task:

To design an alien toy using a range of 2D shapes

### Included Concepts:

- Measurement
- Name, label and create a range of 2D shapes

### Requirements:

... to design an alien toy using 2D shapes that will include; square, circle, rhombus, semi-circle and other regular polygons. How many shapes will you use? How many different shapes will you use? How many different colors will you use? How many different sizes will you use? How many different shapes will you use? How many different colors will you use? How many different sizes will you use?

## Real World Mini Math

### Steps to Take:

1. Sketch out a design for your alien toy.
2. Check that you are including a range of 2D shapes.
3. Use a ruler or graph paper to draw your shape carefully.
4. Label the name of each shape used.
5. Decorate your final product.
6. Share your alien with the class.

### Assessment:

Concepts accurately covered	15
All sections completed to a high standard	15
On task work ethic	15
Clearly shows mathematical thinking/working out	15
Comment:	120





# Digital & Printable Google Slides Option

Record of each 2D shape used in Your Alien Toy



Shape Name	Number of Sides	Perimeter	Area

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# Quick Teacher & Self / Peer Assessment

## Assessment

### Mini Math Project: 2D Alien Toy

Concepts accurately covered	/5
All sections completed to a high standard	/5
Clearly shows mathematical thinking/ working out	/5
Total:	/15

Comment:

### Self/ Peer Assessment:

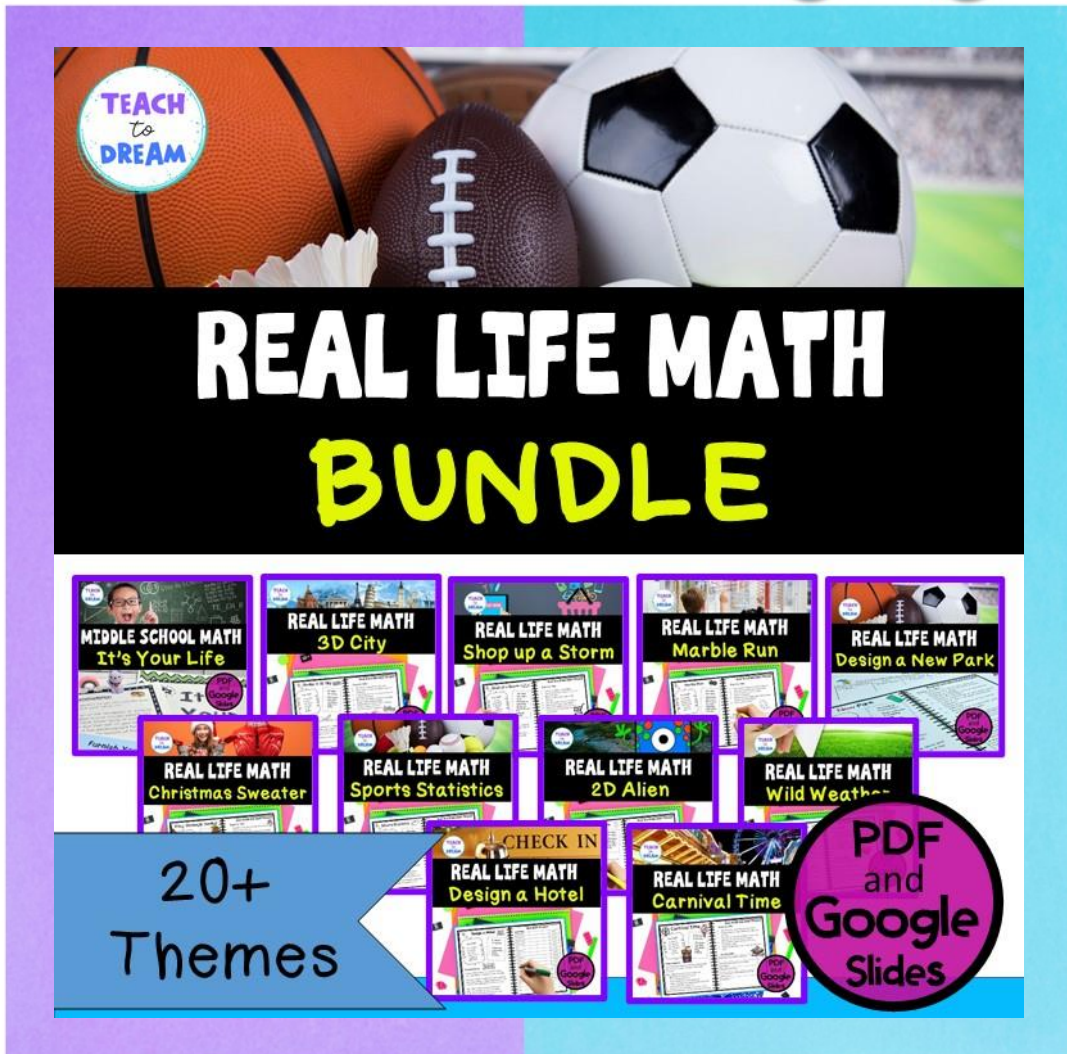
#### Mini Math Project: 2D Alien Toy

Shows mathematical thinking	1 2 3 4 5
Easy to follow/ understand	1 2 3 4 5
Mathematical concepts are completed accurately	1 2 3 4 5
Total:	/15

Best part of the project	Ideas for improvement



# Interested in PBL writing Tasks that Engage?



TEACH to DREAM

## REAL LIFE MATH BUNDLE

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REAL LIFE MATH  
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REAL LIFE MATH  
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REAL LIFE MATH  
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REAL LIFE MATH  
Sports Statistics

REAL LIFE MATH  
2D Alien

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