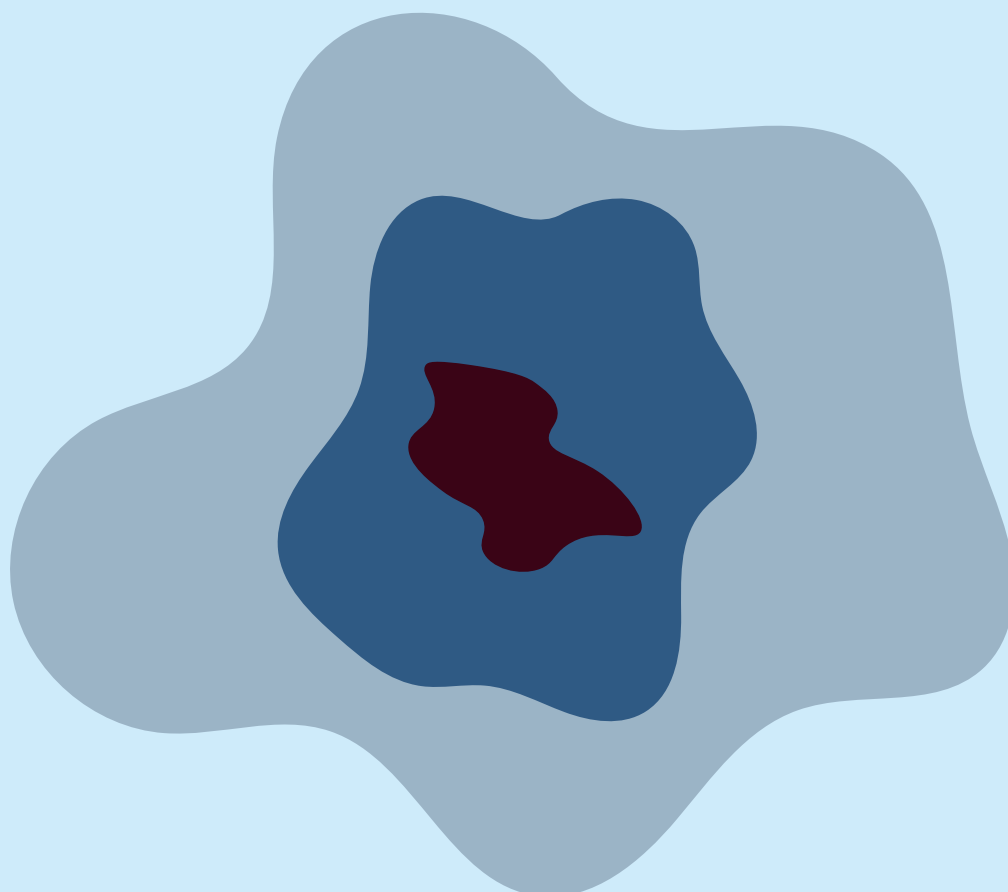


LEVEL 2

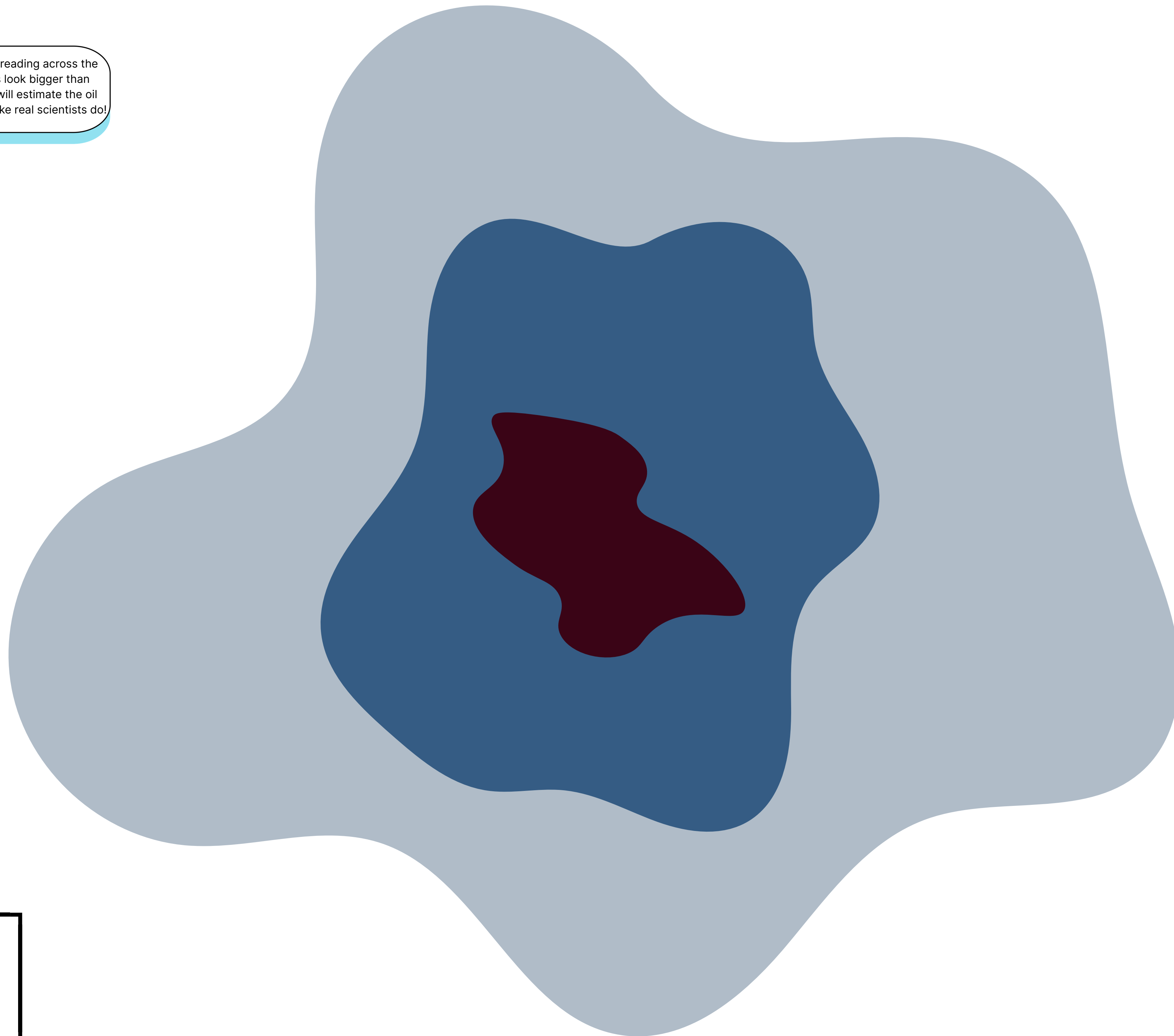
ENIGMATHICO

# ACTIVITY 1

## Oil spill estimates : Surfaces



A dark shape is spreading across the sea. Some zones look bigger than others. Our team will estimate the oil spill's surface, just like real scientists do!



225 m<sup>2</sup>

## Mission sheet:


### Oil spill estimates


#### Mission 1: Surface estimates


#### TOOLS


- The map of the oil spill
- Isabel's tools: Surfaces
- Labelled squares and triangles
- A calculator

#### TEAM ROLES

 **Navigator:** Helps the team decide together where to place the shapes.  
Name: \_\_\_\_\_

 **Counter:** Keeps track of how many shapes are used.  
Name: \_\_\_\_\_

 **Recorder:** Writes numbers, ideas, and reflections.  
Name: \_\_\_\_\_

 **Presenter:** Shares the team's results with the class.  
Name: \_\_\_\_\_

(All members use the shapes, the Navigator just makes sure everyone takes part!)

#### REFLECTION

Which shapes did you try first?

Did they fit well, or did you change your plan?

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#### COUNTING THE SHAPES

How many squares and triangles used in the dark zone?

Squares: \_\_\_\_\_ Triangles: \_\_\_\_\_

How many in the blue zone?

Squares: \_\_\_\_\_ Triangles: \_\_\_\_\_

How many in the grey zone?

Squares: \_\_\_\_\_ Triangles: \_\_\_\_\_

### ESTIMATING THE SURFACE

How many square metres in dark zone?

\_\_\_\_\_ m<sup>2</sup>

How many in the blue zone?

\_\_\_\_\_ m<sup>2</sup>

How many in the grey zone?

\_\_\_\_\_ m<sup>2</sup>



### OVERALL

How big do you think the oil spill is?

Overall surface: \_\_\_\_\_

### REFLECTION

Which zone do you think is most dangerous for sea life and why?

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### METHOD

Was it easy to cover the spill with the shapes? What made it harder?  
Did your team agree on the same strategy?  
If not, how did you decide?

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### CLOSING REFLECTION

One thing I discovered...

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One question I still have...

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One idea from my teammate that helped us...

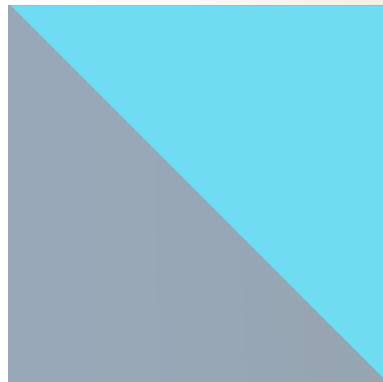
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## Isabel's tools: Surfaces!

Here is a square with a side of 5 cm.  
In our scale,  
1 cm = 3 m in real life.



Calculate  
Real side of the square: \_\_\_\_\_ m  
Surface of the real square:  
\_\_\_\_\_ m<sup>2</sup>



The triangle is exactly half of the square.  
Its surface is: \_\_\_\_\_ m<sup>2</sup>

### Your Tools

Square = \_\_\_\_\_ m<sup>2</sup>

Triangle = \_\_\_\_\_ m<sup>2</sup>



225 m<sup>2</sup> is about the same as...

- ☐ A doghouse?
- ☐ A classroom?
- ☐ A schoolyard?

Can you think of another place or space that might be about 225 m<sup>2</sup>?  
\_\_\_\_\_

The labelled squares and triangles will help us calculate how big the oil spill is! Let's work in teams to cover the spill and estimate its surface!



225 m <sup>2</sup>	225 m <sup>2</sup>	225 m <sup>2</sup>	225 m <sup>2</sup>	225 m <sup>2</sup>
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