

Name:

### Competences

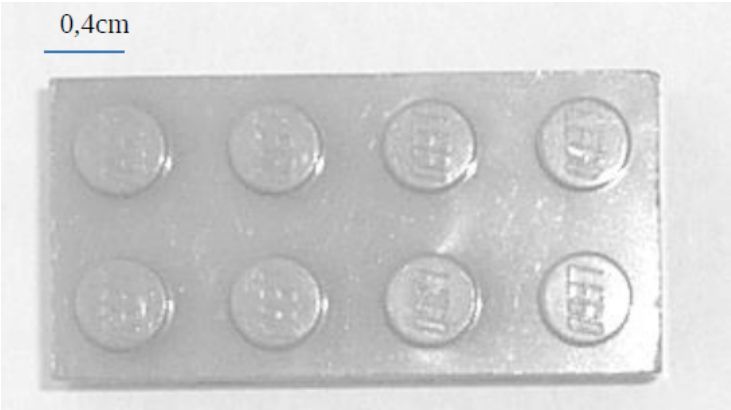
To be autonomous		
To collaborate with peers		
To be aware of its own mistakes - To be able to correct them		

### Capacities

To know the rough size of units		
To calculate with a scale		

# Real size, apparent size, notion of scale

**Activity 1: to know the notion of scale**



1) On your table there are two lego bricks. Which of them corresponds to this photograph? Answer giving the color of the chosen brick. Explain how you chose.

The Lego on this photograph correspond to the Lego ..... because:

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.....

2) Circle the scale on the photograph.

3) What is the scale for?

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4) Which information gives the scale?

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5) From the photograph, how is it possible to give the actual size of this Lego? Give a method indicating what you must do. Each action corresponding to a step (step 1, step 2,...)

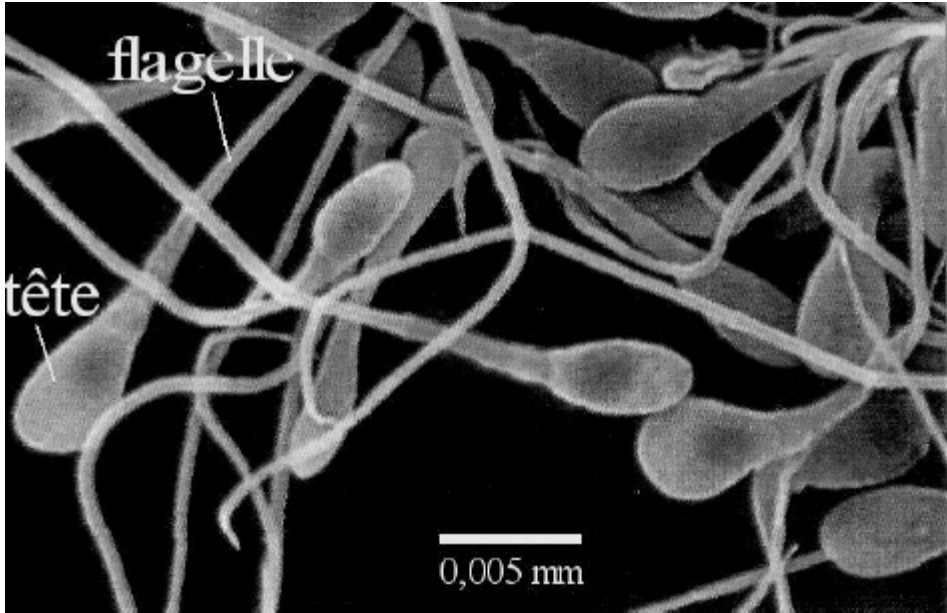
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6) Write your calculation that gives you the actual size of the Lego.

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**Activity 2: real size of a spermatozoon and of an atom**

A) Calculate the actual length of the spermatozoon head. Explain clearly your reasoning.



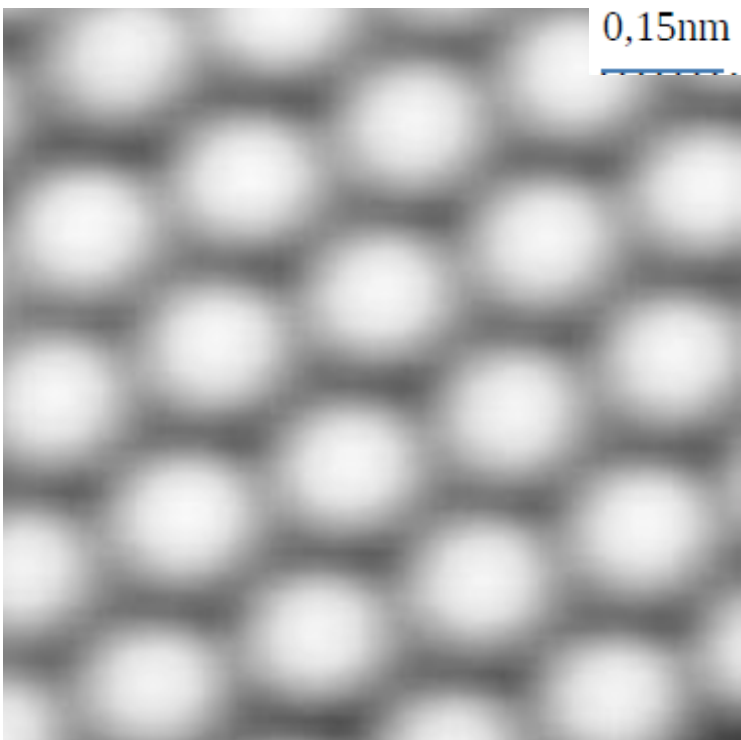
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B) Calculate the actual diameter of a silicon atom. Explain clearly your reasoning. Silicon atoms.

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**Activity 3: rough size of units**

Here is units of length:

m (meter), mm (millimeter), cm (centimeter), dm (decimeter), nm (nanometer),  $\mu\text{m}$  (micrometer)

1) Order these units from the greatest to the smallest.

....., ....., ....., ....., .....

the greatest

the smallest

2) Write the following units in the conversion table

m (meter), mm (millimeter), cm (centimeter), dm (decimeter), nm (nanometer),  $\mu\text{m}$  (micrometer)

(crosses are written on columns without name)

.....	.....	.....	.....	XXXX	XXXX	.....	XXXX	XXXX	.....

3) Write in the previous table the following objects regarding their sizes

A hair, an atom, a spermatozoon, a man, a heart, a foot.