

Name:

Date:

MATTER

ATOMS

Activity 1

Let's investigate atoms.

INVESTIGATING THE SIZE OF AN ATOM

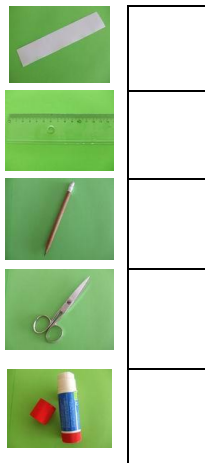
A.- OBJECTIVE:

- To have an idea of how small an atom is.

B.- EQUIPMENT:

Tick them when you leave them on the table.

- A strip of paper 28 cm long and 1 cm wide
- A ruler
- A pencil
- Scissors
- Glue



C.- SAFETY:

Be careful when you use the scissors.

D.- HYPOTHESIS:

After reading the instructions below, tick the hypothesis that you think is correct or write down another hypothesis.

- 1.- I think I will be able to cut the piece of paper 30 times. That will mean that I will be able to see the last piece of paper.

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2.- I think I will not be able to cut the piece of paper 30 times. That will mean that I will not be able to see the last piece of paper.

3.-

E.- INSTRUCTIONS AND DIAGRAM (record the data on part "F" when you do this activity):

- 1.- Cut the strip into two pieces of exactly the same length, and discard one piece.
- 2.- Again cut the strip that you didn't discard into two pieces of exactly the same length, and discard one piece.
- 3.- Again cut the strip that you didn't discard into two pieces of exactly the same length, and discard one piece.
- 4.- Again cut the strip that you didn't discard into two pieces of exactly the same length, and discard one piece.
- 5.- Again cut the strip that you didn't discard into two pieces of exactly the same length, and discard one piece.
- 6.- Again cut the strip that you didn't discard into two pieces of exactly the same length, and discard one piece.
- 7.- Again cut the strip that you didn't discard into two pieces of exactly the same length, and discard one piece.
- 8.- Again cut the strip that you didn't discard into two pieces of exactly the same length, and discard one piece.
- 9.- Again cut the strip that you didn't discard into two pieces of exactly the same length, and discard one piece.
- 10.- Again cut the strip that you didn't discard into two pieces of exactly the same length, and discard one piece.
- 11.- Again cut the strip that you didn't discard into two pieces of exactly the same length, and discard one piece.
- 12.- Again cut the strip that you didn't discard into two pieces of exactly the same length, and discard one piece.
- 13.- Again cut the strip that you didn't discard into two pieces of exactly the same length, and discard one piece.
- 14.- Again cut the strip that you didn't discard into two pieces of exactly the same length, and discard one piece.
- 13.- Again cut the strip that you didn't discard into two pieces of exactly the same length, and discard one piece.

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- 14.- Again cut the strip that you didn't discard into two pieces of exactly the same length, and discard one piece.
- 15.- Again cut the strip that you didn't discard into two pieces of exactly the same length, and discard one piece.
- 16.- Again cut the strip that you didn't discard into two pieces of exactly the same length, and discard one piece.
- 17.- Again cut the strip that you didn't discard into two pieces of exactly the same length, and discard one piece.
- 18.- Again cut the strip that you didn't discard into two pieces of exactly the same length, and discard one piece.
- 19.- Again cut the strip that you didn't discard into two pieces of exactly the same length, and discard one piece.
- 20.- Again cut the strip that you didn't discard into two pieces of exactly the same length, and discard one piece.
- 21.- Again cut the strip that you didn't discard into two pieces of exactly the same length, and discard one piece.
- 22.- Again cut the strip that you didn't discard into two pieces of exactly the same length, and discard one piece.
- 23.- Again cut the strip that you didn't discard into two pieces of exactly the same length, and discard one piece.
- 24.- Again cut the strip that you didn't discard into two pieces of exactly the same length, and discard one piece.
- 25.- Again cut the strip that you didn't discard into two pieces of exactly the same length, and discard one piece.
- 26.- Again cut the strip that you didn't discard into two pieces of exactly the same length, and discard one piece.
- 27.- Again cut the strip that you didn't discard into two pieces of exactly the same length, and discard one piece.
- 28.- Again cut the strip that you didn't discard into two pieces of exactly the same length, and discard one piece.
- 29.- Again cut the strip that you didn't discard into two pieces of exactly the same length, and discard one piece.
- 30.- Again cut the strip that you didn't discard into two pieces of exactly the same length, and discard one piece.

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Diagram

F.- RECORDING THE DATA:

Number of cuts	Strip length	Stick the leftover piece of paper here
0 cuts	28 cm	(You haven't got a leftover piece of paper yet)
1 cut	_____ cm	
2 cuts	_____ cm	
3 cuts	_____ cm	
4 cuts	_____ cm	
5 cuts	_____ cm	
6 cuts	_____	
7 cuts	_____	
8 cuts	_____	
9 cuts	_____	

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10 cuts	_____	
11 cuts	_____	
12 cuts	_____	
13 cuts	_____	
14 cuts	_____	
15 cuts	_____	
16 cuts	_____	
17 cuts	_____	
18 cuts	_____	
19 cuts	_____	
20 cuts	_____	
21 cuts	_____	
22 cuts	_____	
23 cuts	_____	
24 cuts	_____	
25 cuts	_____	

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26 cuts	_____	
27 cuts	_____	
28 cuts	_____	
29 cuts	_____	
30 cuts	_____	

G.- OBSERVATIONS:

H.- CONCLUSIONS:



Activity 1

- G.-** - I/We could cut the piece of paper (*number*) times.
- The last piece of paper is *tiny/very small/small/big/ very big/enormous/...*
- H.-** - I/We *could/couldn't* see the paper atoms.
- Atoms are the *smallest/biggest* particle of matter.