

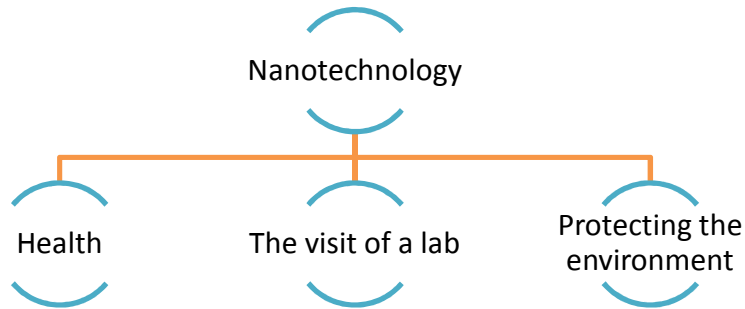
VIDEO COMPREHENSION. A Precious Envelope for Budding Scientists (correction)

1. These topics all belong to the animation movie.

My score : correct answers /4

Health ; nanotechnology ; the visit of a lab ; protecting our environment .

Write their names in the bubbles, with the most important one at the top.



2. The characters (personnages) in this story. Match their names and descriptions

My score : correct answers /5

Works at the lab : YES or NO (write ? if you can't say)	Characters	Descriptions
?	Nano	The young girl who finds the envelope
NO	Nat	The young boy, Nat's brother
YES	Kira	The scientist
NO	Pat	The yellow cartoon character
YES	« Doctor John Old »	The lady scientist

3. About nanotechnology. What are the 2 main parts in the movie ? Choose and write their names in the boxes. Cross out the wrong ones.

My score : correct answers / 2

- a) The dangers of nanoparticles ;
- b) the process = how nanotechnology works ;
- c) the nanotechnology inventors ;
- d) the advantages of nanotechnology.

The 2 Main parts :

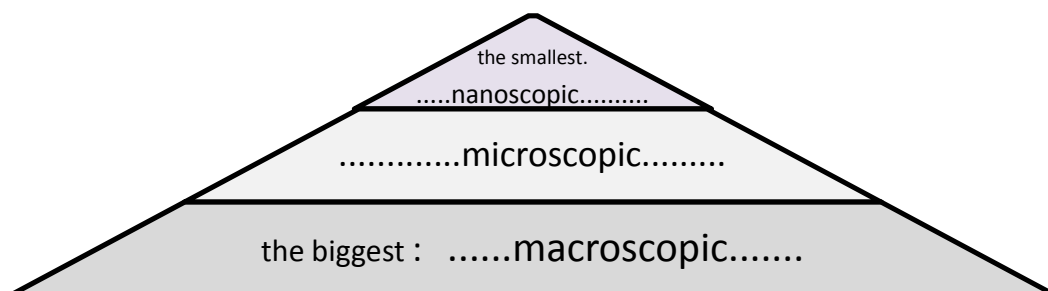
The process

the advantages of nanotechnology

4. Place the 3 words in the grid, from the smallest to the biggest :

My score : correct answers /3

microscopic macroscopic nanoscopic



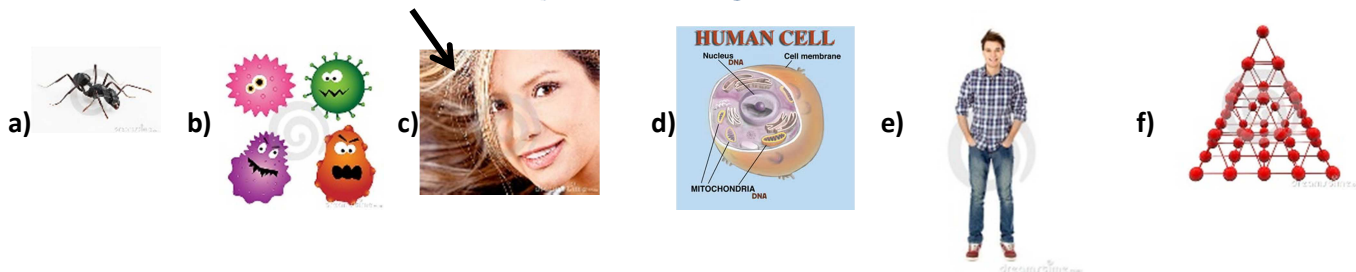
5. Look at the pictures. Circle the letters that belong to each « world » Like



The macroscopic world contains pictures **a** b c d **e** f

The microscopic world contains pictures a b **c** **d** e f

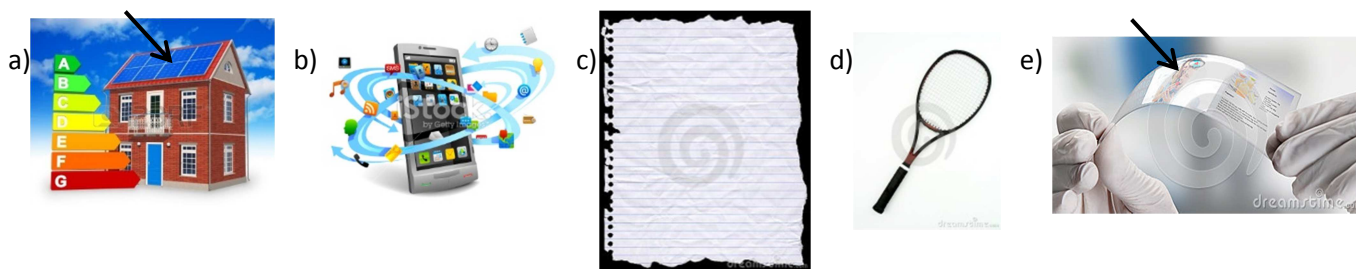
The nanoscopic world contains pictures a **b** c d e **f**



6. Write the letter for each word in this grid :

Viruses	A human being	An ant= an insect	A human cell	A diamond carbon molecule	A human hair
b	e	a	d	f	c

7. These innovations were created thanks to nanotechnology ... or not !



Match their names and the correct letters :

Object name	Matching Letter
A tennis racket	a
Photovoltaic cells to make solar panels	b
A flexible screen	c
A mobile phone	d
A sheet of paper	e

8. Choose and write **a ; b ; c ; d ; e ; f** in the correct box. My score : correct answers /5

Object(s) made with the help of nanotechnology Write a or b or c or d or e	Object(s) made without any nanoparticles. Write a or b or c or d or e
a ; b ; d ; e	c

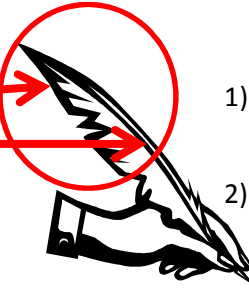
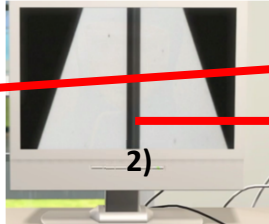
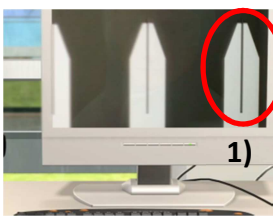
Video Comprehension. VIDEO CLIP N°1 (Correction)

Choose the correct expressions from the film and write A or B or C or D or E next to the corresponding picture.

A) the nanodrop will become coloured if it contains this gene ; **B)** a feather of nanometric size.

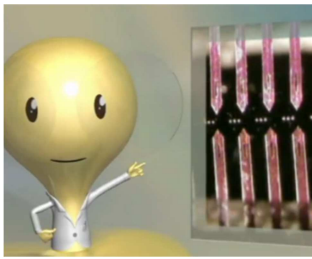
C) DNA molecules that contain the gene of a disease inside minuscule drops

D) a canal where the ink arrives ; **E)** « So this is what a bioplume is ? »

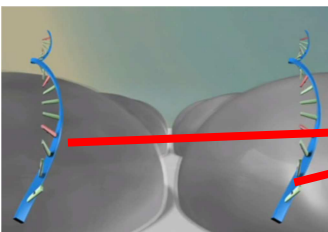


1) **B**

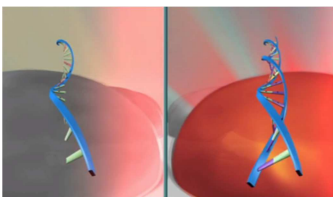
2) **D**



3) **E**



4) **C**

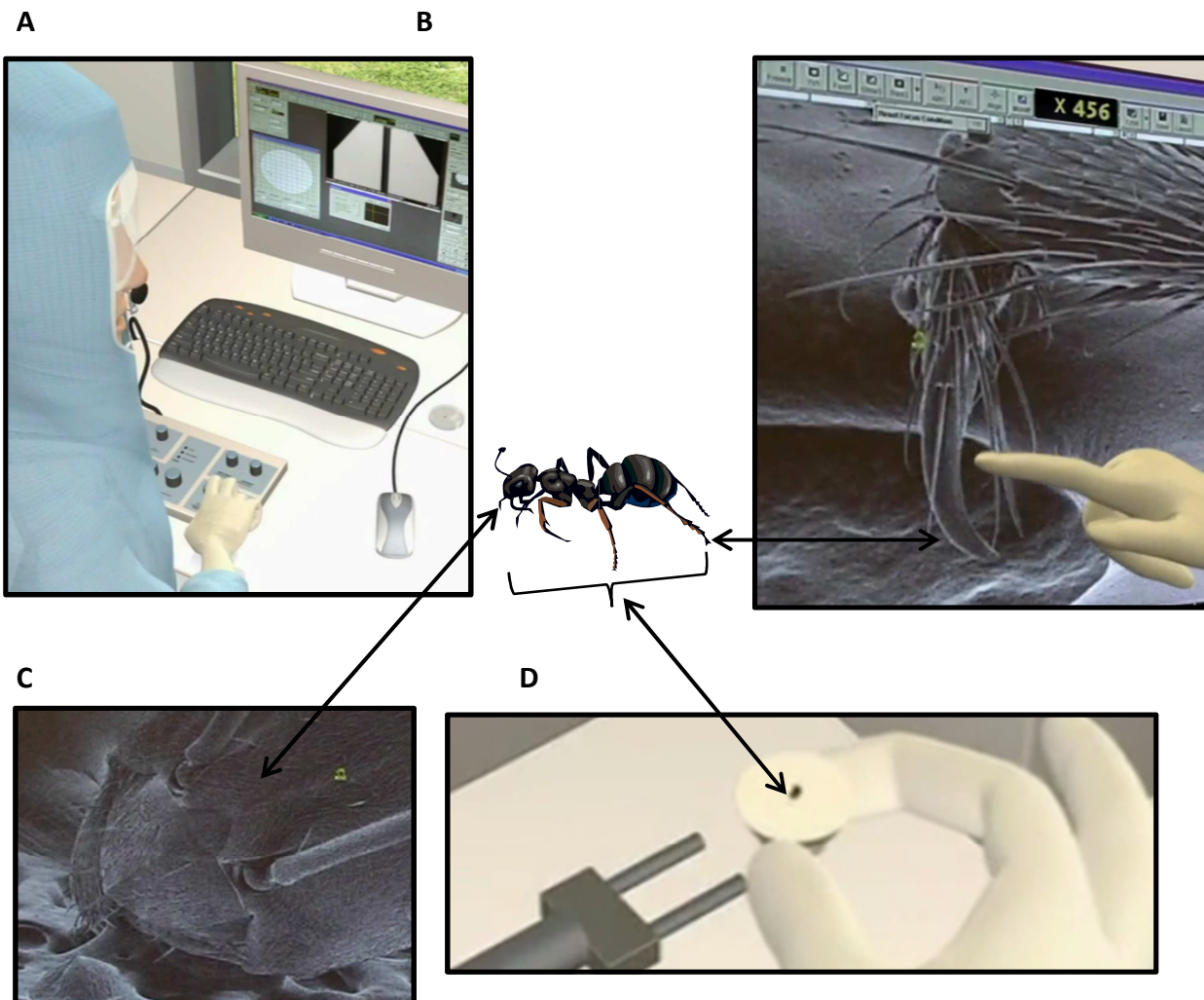


5) **A**

VIDEO COMPREHENSION N° 2 (correction)

Look at the snapshots A, B, C, D from the film extract. For each sentence, choose the corresponding snapshot.

1. We can see the head of the insect on snapshot **C**
2. This shows the leg of the insect with a hook at the end. Snapshot **B**.
3. On snapshot **A**, we can see the scientist working on his computer. The boy, Pat, is pointing at the screen.
4. This tiny black dot on snapshot **D** shows an insect.
5. Did you hear the insect's name? Circle it! *a beetle* / **an ant** / *a butterfly*.



Reorder these expressions: 1st sentence = C ; 2nd = D ; 3rd = A ; 4th = E ; 5th = B

- A. Who would like to take the controls ?
- B. When we observe the small details we can better understand the ant and how this small world works.
- C. Would you like to observe an ant ?
- D. Here the ant is in a vacuum I switch on the electron beam that will allow us to see it. Clipart name : 00346891.wmf
- E. You turn this button to zoom in and this one to focus.

VIDEO COMPREHENSION N°3 Macro to Nano (Correction)

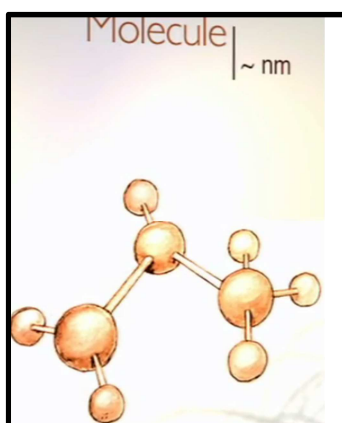
Write in the grid the letters (A to F) or names written on the posters.

The scale (l'échelle)	Write the names or letters (A to F) of the elements	Visible <u>to the naked eye</u> (à l'œil nu) Choose YES or NO
The macroscopic world :	A insect ; E Human	YES
The microscopic world	C Hair ; D Bacterium	NO
The nanoscopic world	B Molecule ; F Virus	NO

A



B



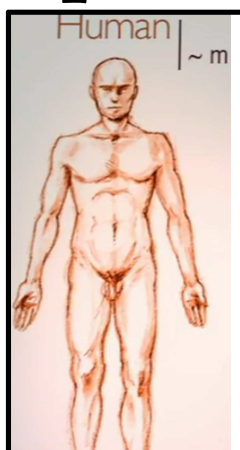
C



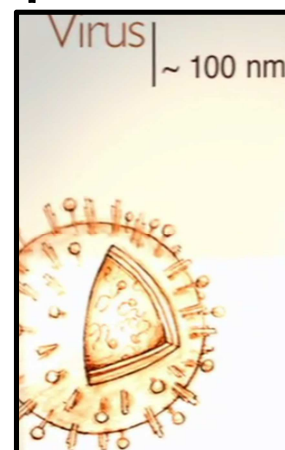
D



E



F



Instruction : Complete the 2 sentences.

The smallest « world » is the **nanoscopic** world.
the largest « world » is the **macroscopic** world.

Instruction : Circle the correct answers in this conclusion.

Conclusion :

...../2

1. So far, how many different scales of elements have been discovered ? 2 : **3** ; 6
2. There are many more discoveries to be made at the nanometric scale : **YES** NO