NAME :..... First name :.....

Assessment: lenses

To apply the lesson about lenses	
To draw a diagram	

Exercise 1: knowledge about lenses (...../2,5pts)

Circle the good answer(s)

1/ A convergent lens has	Thin edges	Thick edges	A thick center
2/ The luminous energy is concentrated	In the center of the convergent lens.	In the focus of the convergent lens.	On the edges of the convergent lens.
3/ the focal distance of a convergent lens is the distance ...	Between the object and the lens.	Between the lens and the focus.	Between the lens and the image.
4/ In order to obtain an image on a screen, you must place (in good order):	Object-screen-lens	Object-lens-screen.	Screen-lens-object.
5/ There is an image on the screen if the distance between the object and the lens is:	Larger than the focal distance.	Smaller than the focal distance.	Equal to the focal distance.

Exercise 2: knowledge about lenses (...../3pts)

1°) What experiment is it possible to do in order to know if the lens of apair of glasses are convergent?

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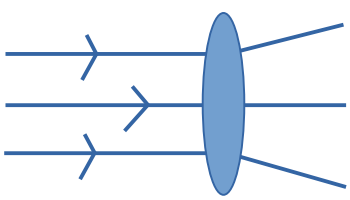
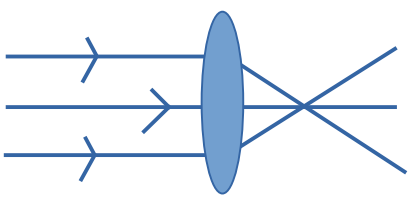
2°) On the following diagrams, parallel rays reach a lens.

-a- Show the convergent lens. ……



lens1



lens 2

Exercise 3: a new situation (……/4,5pts)

A student uses a convergent lens of focal distance 3cm, a letter object F 1cm high, a screen in order to observe a clear image.
The object is 4cm far from the lens. In order to see the image, the screen must be 7.5cm from the lens.

1°) Draw the diagram of this situation, respecting the given distances and write the caption, indicating where is the object, the image, the lens, the focal distance.

2°) Another student is not here when performing the experience. Describe the image on the screen.

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3°) Explain what the lens is doing.

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