

## Energy - Homework 3

1. This question involves you doing a simple experiment at home.

**Apparatus:** You will need a 1p coin, a mug, a piece of blutak (or some sellotape) and a jug of water

**Method:**1. Put the mug on a table

2. Stick the 1p coin in the centre of the bottom of the mug using the blutak (sellotape will do if you don't have blutak)

3. Move your head until the coin **just** disappears behind the rim of the mug

4. Keeping your head in the same place and watching the mug all the time slowly and carefully pour the water into the mug until the mug is full of water.

a) **What did you see happening? Write your answer in the box below.**

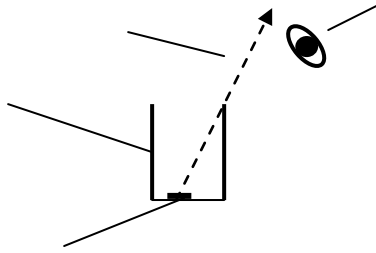
I saw:

(2)

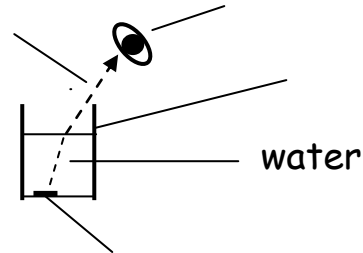
b) The diagrams below show the experiment.  
Write the labels in the right places on both of the diagrams.

Labels: coin      light beam      mug      eye

Before adding water



After adding water



(1)

Fill in the gaps in the sentences below.

Before adding water

No light beam from the coin goes into the \_\_\_\_\_.

So the coin \_\_\_\_\_ be seen.

After adding water

Light beams from the coin now \_\_\_\_\_ at the surface of the water and go into the \_\_\_\_\_.

So the coin \_\_\_\_\_ be seen.

(5)

2. Fill in the missing words in the following passage using the word bank:

You can see a rainbow in the sky because falling \_\_\_\_\_ act like little \_\_\_\_\_. The raindrops split the \_\_\_\_\_ that shines on them into a \_\_\_\_\_ of colours.

(2)

Wordbank: prisms, sunshine, spectrum, raindrops