Year 9 Science

Physics: Light Refraction Revision

INSTRUCTIONS:

- Paste this sheet on the left side of a new double page in your workbook
- Answer the following questions in your workbook on the right side of the double page with the heading 'Refraction Revision – Light'
- This piece of work should take you 30mins to complete
- Do not write the questions out. Your answers should be concise – don't waffle. Make sure that you give as much relevant information as possible
- All diagrams must be drawn with a pencil and ruler

QUESTIONS:

1. What is meant by the 'refraction of light'?

2. When you add water to an evaporating dish with a coin sitting in the bottom it appears to 'move'. Briefly describe how and explain why this happens. Use a diagram to help illustrate your answer.

3. Explain with a diagram which way light bends when it slows down while passing from **air into water**, ie. towards or away from the normal ?

4. Look at the picture below. Annotate the diagram to show the refraction of light being reflected off the fish to the girl. Be careful when using solid and dotted lines to show the actual path of the light rays. Explain why the spear should be aimed in front of the fish as the girl sees it from above the surface of the water. Make sure that you draw in the normal line.

6. Imagine that you are the fish in the picture above. Will the image of the girl's head be higher or lower than her real head ? Explain with the aid of a diagram and a brief written explanation.