

Logic Puzzles

Group Members

1	Usman
2	Michael
3	Kent
4	Andre

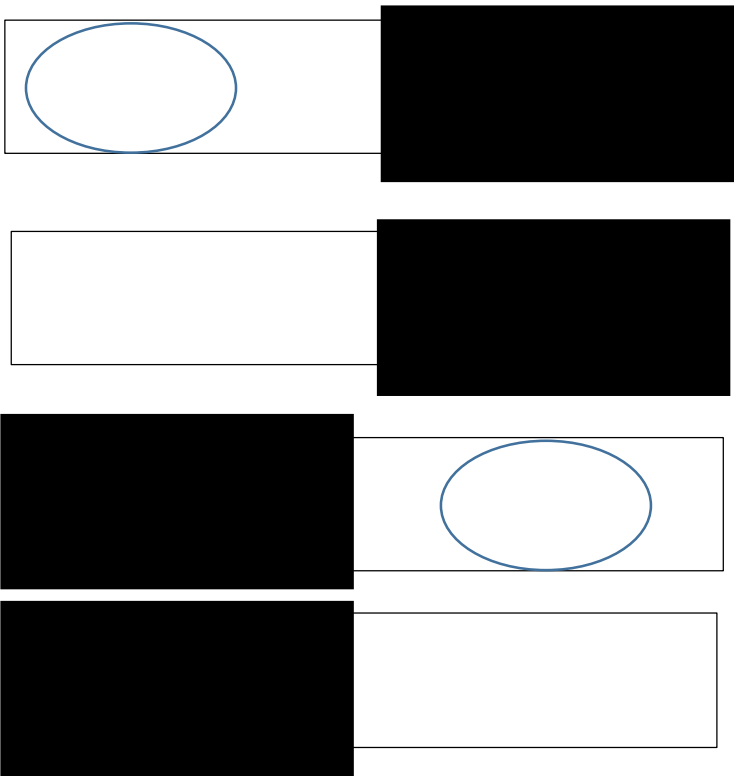
1. In the design of these 4 WIBBLES, there is a particular shape and a particular colour such that any WIBBLE design that has one, and only one, of these features is called A PHOOG.

If the Blue Diamond is a PHOOD, could any of these other designs also be a PHOOG?

- **Blue Diamond**
- **Blue Circle**
- **Red Diamond**
- Red Circle

Yes, because each of the highlighted WIBBLES have one of the features. For example, blue circle has “blue” as a feature that is also a feature within Blue Diamond.

2. There are 4 cards shown below. Half of each card is concealed. Which of the hidden parts of these cards do you need to see in order to answer the following question decisively?



Yes, it is true. The first one shows us that there is a circle on the left, but also does the second to last.

For these cards, is it true that if there is a circle on the left there is a circle on the right?

3. Three boxes are have all been labelled incorrectly and you are required to swap the labels onto the appropriate box. The labels on the boxes read as follows:

[box 1] buttons

[box 2] coins

[box 3] buttons and coins

To gain the information you need to move the labels to the correct boxes, you may remove a single item from one and only one of the boxes. You may not look into the boxes, nor pick them up and shake them, etc.

We chose to gain information by choosing box 3.

4. You encounter 3 trolls, a truth teller who always tells the truth, a liar who always lies, and one who sometimes answers truthfully and sometimes lies. You may ask only three yes or no questions to determine which troll is which. Each time you ask a question, it must be directed to one and only one of the trolls. You may ask the same question more than once, but of course, it will count towards your total.

What are your questions and to whom you will ask them?

Question 1: Are you a troll? – A truth teller who always tells the truth.

Question 2: Are you a troll? – A liar who always lies

Question 3: Are you a troll? – One who sometimes answers truthfully and sometime lies.

We got these questions, because question 1 and question 2 will always be yes and no. This will leave us with the last person which can be a guess.