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## Mix and Match Colour Lab

## Materials:

- Food colouring; blue, yellow, red, green
- Cotton swabs (4)
- Plastic Cups (4)
- Piece of white paper (1)
- Water

Procedure:

1) Place a few drops of red food colouring on the end of a cotton swab.
2) Using the cotton swab make a red circle on the white paper (2cm diameter).
3) Repeat this process with the three remaining colours.
4) Fill each cup about half way with water. Add 3-5 drops of food colouring into each cup. You should have one of each: yellow, red, green and blue.
5) Take the blue cup and place it over the red dot. What colour is produced? Repeat this process with the remaining dots and cups. Fill in the following chart:

| Cup Colour | Dot Colour | Resulting Colour |
| :---: | :---: | :---: |
| RED | RED |  |
| RED | BLUE |  |
| RED | GREEN |  |
| RED | YELLOW |  |
| BLUE | RED |  |
| BLUE | BLUE |  |
| BLUE | GREEN |  |
| BLUE | YELLOW |  |
| GREEN | RED |  |
| GREEN | BLUE |  |

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| Cup Colour | Dot Colour | Resulting Colour |
| :---: | :---: | :---: |
| GREEN | GREEN |  |
| GREEN | YELLOW |  |
| YELLOW | RED |  |
| YELLOW | BLUE |  |
| YELLOW | GREEN |  |
| YELLOW | YELLOW |  |

Application Questions:

1) What is happening when you place the cup on top of the dot? Why does the colour change?
2) Does it make a difference if you hold the cup above the dot or place the cup down? Why or why not?
3) ROY G BIV is the acronym for the colours of the rainbow. Red and Yellow make Orange. What two colours make green? Is the orders in the colour of the rainbow a coincidence?
4) What are the three additive primary colours?
5) What are the three secondary colours? What can these three colours do?
