

# Paper money for Monopoly (version B)

This task is about using evidence to answer questions about properties of paper.



A class of Year 6 students are creating a Samoan version of Monopoly. They would like to copy Samoan money but cannot decide on which paper to use in their game. In order to make the 'right' decision, students decided to carry out some science investigations on different types of paper

a) Students planned and carried out four investigations on the properties of paper. Their results are provided in the following table. They rated each property using a scale: 1 2 3 4 5. Where 1 = poor, and 5 = good.

Use the information from the table to answer the following questions about the properties of paper.

| Investigation     | Photocopier paper | Newsprint | Drawing paper | Butcher (craft) paper | Thin card |
|-------------------|-------------------|-----------|---------------|-----------------------|-----------|
| Grease absorbency | 3                 | 5         | 2-3           | 1                     | 1-3       |
| Durability        | 4                 | 1         | 3-4           | 4-5                   | 3         |
| Bendable          | 4                 | 5         | 3             | 2-3                   | 1         |
| See through       | 2                 | 5         | 1             | 1                     | 1         |

i) Which paper absorbs the least amount of grease?

|   |   |
|---|---|
| <input type="radio"/> Photocopier paper | <input type="radio"/> Newsprint             |
| <input type="radio"/> Drawing paper     | <input type="radio"/> Butcher (craft) paper |
| <input type="radio"/> Thin card         |   |

ii) Which paper is the most durable?

|   |   |
|---|---|
| <input type="radio"/> Photocopier paper | <input type="radio"/> Newsprint             |
| <input type="radio"/> Drawing paper     | <input type="radio"/> Butcher (craft) paper |
| <input type="radio"/> Thin card         |   |

iii) Which paper is easy to bend?

|   |   |
|---|---|
| <input type="radio"/> Photocopier paper | <input type="radio"/> Newsprint             |
| <input type="radio"/> Drawing paper     | <input type="radio"/> Butcher (craft) paper |
| <input type="radio"/> Thin card         |   |

iv) Which paper(s) can be photocopied on both sides without showing through on the other side?  
*You can select more than one option*

|   |   |
|---|---|
| <input type="radio"/> Photocopier paper | <input type="radio"/> Newsprint             |
| <input type="radio"/> Drawing paper     | <input type="radio"/> Butcher (craft) paper |
| <input type="radio"/> Thin card         |   |

b) i) If the class used all the data collected in the table, which paper should the students use to make their monopoly money?

|   |   |
|---|---|
| <input type="radio"/> Photocopier paper | <input type="radio"/> Newsprint             |
| <input type="radio"/> Drawing paper     | <input type="radio"/> Butcher (craft) paper |
| <input type="radio"/> Thin card         |   |

ii) Explain to the students why they should use the paper described in 'i)' above.

c) i) If you carried out the investigations, is it likely your results would be exactly the same as those in the chart?

|                           |                          |
|---------------------------|--------------------------|
| <input type="radio"/> YES | <input type="radio"/> NO |
|---------------------------|--------------------------|

ii) Explain your answer.

iii) If scientists are to make a decision about Monopoly money, which of the following ideas are useful when they plan their investigations for the same questions?

### Investigation Ideas

Use different paper colours for each test *Useful/ Not useful/ Don't know*

Keep the paper the same size for each test *Useful/ Not useful/ Don't know*

Repeat the test lots of times for each paper *Useful/ Not useful/ Don't know*

Same person will collect the data for each test *Useful/ Not useful/ Don't know*

Keep the paper the same thickness for each test *Useful/ Not useful/ Don't know*