



Secret Message

I can use my knowledge of light and colour to create a secret message.



Can you write a secret message that is only visible when you look through a coloured filter?

Use a light blue colouring pen or pencil to write your message in the box below. Then use orange, pink, red and yellow pens or pencils to colour a pattern around it, hiding the message from view. Your partner should be able to decode the message by looking at it through a red filter.

Ask your partner to decode the message and complete this sentence:

The secret message says _____.

How does the red filter make your message easy to read? Explain your ideas by filling in the gaps below.

The blue writing in my message reflects _____ light. When I look at it through a red filter, the blue light is _____, so the writing looks _____ and stands out. The red patterns over and around my message make it hard to read in normal light, but the patterns _____ red light which can pass _____ the red filter, so they do not stand out when my partner looks through the filter. This is how my partner can _____ the message by looking through the red filter.

Use these words to help you.

read



absorbed



reflect



black



through



blue





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Can you write a secret message that is only visible when you look through a coloured filter?

Choose a coloured filter and try looking at different colours of pens or pencils through it. Choose the colour that looks blackest through your filter, and use this to write your secret message. Then choose colours that look light or disappear when you look at them through the filter, and use these to draw a pattern around and over your message, hiding it from view. Your partner should be able to decode the message by looking at it through your filter.

Ask your partner to decode the message and complete this sentence:

The secret message says _____.

How does the red filter make your message easy to read? Explain your ideas by filling in the gaps below.

The _____ writing in my message reflects _____. When I look at it through a _____ filter, _____.

The _____ patterns over and around my message make it hard to read in normal light, but the patterns reflect _____. When my partner looks at them through the _____ filter, _____.

This is how my partner can read the message by looking through the red filter.



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Can you write a secret message that says one thing when looked at through one colour of filter, but says something else when viewed through a different coloured filter?

Choose two coloured filters and try looking at different colours of pens or pencils through them. Choose the best colours to write your messages, checking them through the filters to make sure they stand out. Then choose colours that look light or disappear when you look at them through the filters, and use these to draw a pattern around and over your messages, hiding them from view. Your partner should be able to decode the messages by looking at them through your different filters.

Ask your partner to decode the message and complete this sentence:

The secret message says _____.

How does the red filter make your message easy to read? Explain your ideas below.