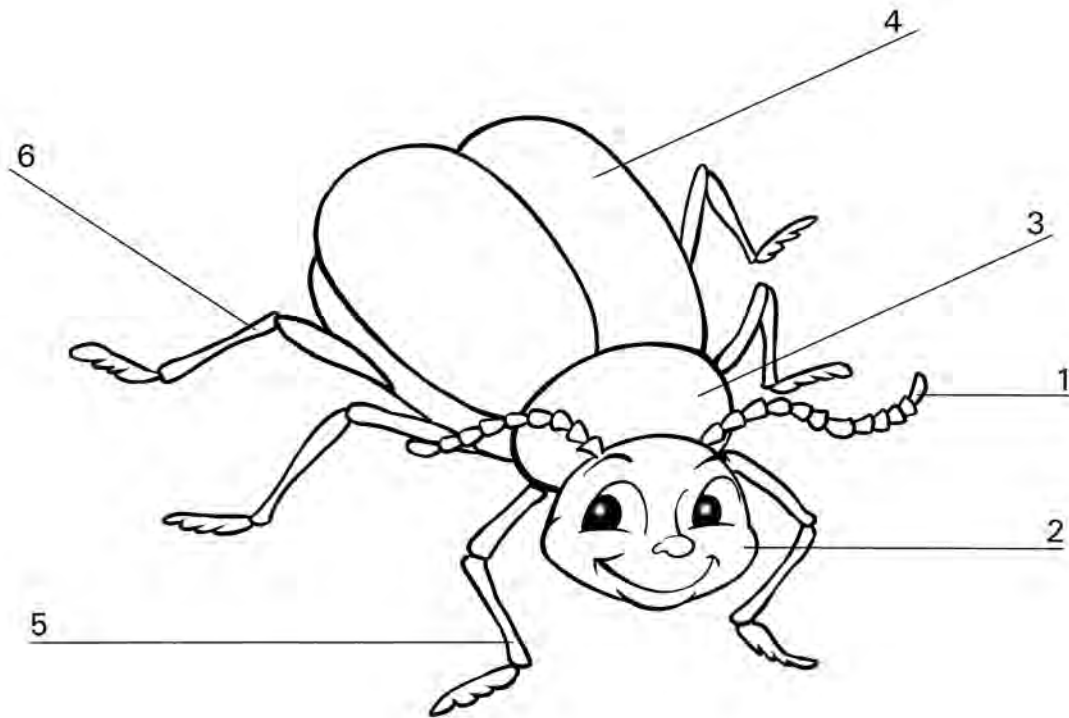


Maths Glyphs 2
Jean Brewster



Activity 1

Look at the picture of a beetle and find area 1. Read the first sentence in the key. If you think *yes*, colour area 1 in blue. If you think *no*, colour area 1 in green. Continue with area 2 using the key below. Then continue with area 3 and so on. Now you have a beetle glyph with hidden information. You can only work out what this drawing tells you if you have the secret key.

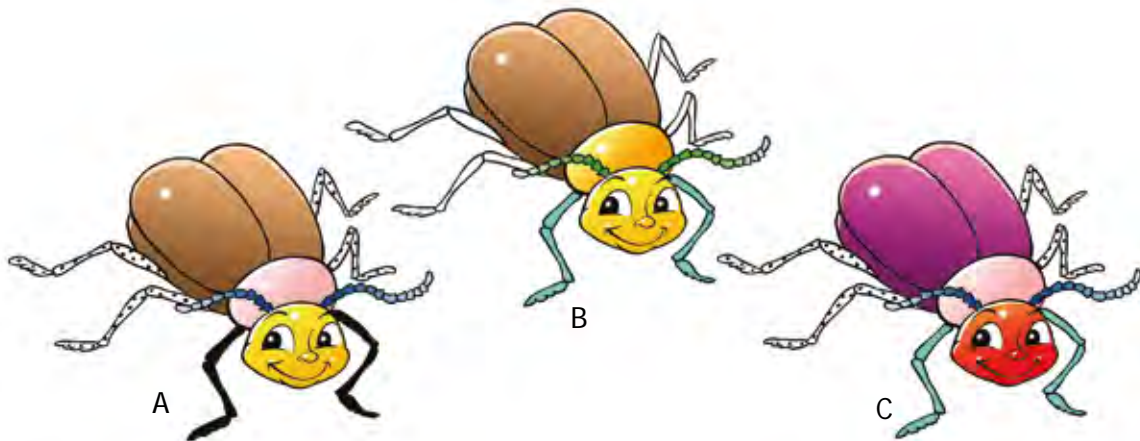
Easier: Yes/No Key	
<p>I think beetles are cool. Yes = colour area 1 blue No = colour area 1 green</p>	<p>I would like a pet beetle. Yes = colour area 4 purple No = colour area 4 brown</p>
<p>I am afraid of beetles. Yes = colour area 2 red No = colour area 2 yellow</p>	<p>I think beetles can be lots of different colours. Yes = colour area 5 black No = colour area 5 turquoise</p>
<p>I have seen a beetle in a garden. Yes = colour area 3 pink No = colour area 3 orange</p>	<p>I think some types of beetle have spots. Yes = put spots in area 6 No = don't put spots in area 6</p>

Activity 2

Give your beetle glyph to your partner and ask him/her to work out your secret information in this glyph. Check if they are right. They will give you their beetle glyph to work out their secret information.

Activity 3

Now look at the different pictures of beetles and choose one. With a partner read the second key with If sentences. Talk about it and then use the different colours to work out the hidden information. Copy down the correct sentences.



More difficult: If Key	
<p>I think beetles are cool. If the answer is yes, colour area 1 blue. If no, colour area 1 green.</p>	<p>I would like a pet beetle. If the answer is yes, colour area 4 purple. If no, colour area 4 brown.</p>
<p>I am afraid of beetles. If the answer is yes, colour area 2 red. If no, colour area 2 yellow.</p>	<p>I think beetles can be lots of/many different colours. If the answer is yes, colour area 5 black. If no, colour area 5 turquoise.</p>
<p>I have seen a beetle in a garden. If the answer is yes, colour area 3 pink. If no, colour area 3 orange.</p>	<p>I think some types of beetle have spots. If the answer is yes, put spots in area 6. If no, don't put spots in area 6.</p>

Activity 4

If you feel confident, write your own key for a different animal or insect and draw a different animal.

Glyphs 2

Jean Brewster

Subject

Maths

Objectives

Process Skills:

Recording and interpreting information, understanding and using a key.

Language Skills:

Easy – mainly listening, speaking and reading; more difficult – guided writing using the key as a writing frame.

Vocabulary:

Parts of the beetle's body e.g. *head, eyes, spots*; adjectives e.g. *cool, afraid, turquoise*; verbs e.g. *colour, like*; quantifiers e.g. *some, lots of, many, all*; adverbs e.g. *always, sometimes, never*; connectors e.g. *and, but, so, because*.

Sentence Patterns:

I think ...; I am afraid of ...; I would like ...; I have seen ...; Beetles can be ...; I think ... because; This is ... so; She thinks but he think s...; This means ...

Thinking Skills:

Remembering - identifying, naming, finding main features.

Understanding - interpreting, comparing, giving reasons, explaining cause and effect.

Creating (advanced) - planning and designing a similar key.

Materials and preparation

- 2 numbered but uncoloured templates of a beetle.
- 3 copies of numbered and coloured beetle glyphs.
- Number 1-6 key areas of the template, i.e. the antennae, head, eyes, neck, body, legs.
- Coloured pens.

Introduction

Glyphs encourage learners to use keys to record and interpret information.

There are at least 3 types of key: picture keys, yes/no keys and if keys. These glyphs use the yes/no and if keys. Learners can progress from recording information on a glyph and interpreting it to creating their own glyphs and keys for other learners to use.

Warm up

- 1 Go round the class asking about beetles: *Who has seen one? Where? Are you afraid of beetles? What do you know about them? etc.*
- 2 Introduce the picture of the beetle and the areas labelled with different numbers. Revise/teach more difficult colours such as purple or turquoise.
- 3 Tell them in words they understand that they are going to practise recording and interpreting information.

Activity 1

- 1 Introduce the idea of a key using the yes/no key 1. Practice reading each statement and ask learners who agree (yes). Colour the beetle according to the written key.
- 2 Now ask the children who does not agree (no). Colour the second template with the different colours to demonstrate how two different answers would be shown on two different glyphs.
- 3 Check that the children understand the process of recording information.
- 4 Introduce or revise any key/unknown words to check the children understand and can read the statements in the key by themselves.

- 5 Hand out the template and key and ask the children to read the statements in pairs and discuss whether they agree or disagree.
- 6 Ask them to colour in the template according to their own ideas.

Activity 2

Now ask the children to read each other's glyphs and interpret the hidden information. Model true or false statements or ask the children to make a quiz themselves.

For example:

In this glyph Maja thinks all beetle have spots. Is this true?

Or

Who thinks beetles are cool, can have lots of spots and has seen one in their garden?

Activity 3

- 1 Show a glyph that represents your ideas about beetles. Introduce key 2 using *If*. Demonstrate that it is the same as key 1 but longer. Ask the children to interpret your glyph saying: You have coloured area 1 in green. This means you do not think beetles are cool. And so on.
- 2 Learners then choose a completed glyph from the set of 3 provided and interpret the information. They copy down sentences to make a written report.

For example:

Person A thinks that beetles are cool but is afraid of them.

Activity 4

More confident learners might like to create their own glyphs using the web site or other materials and their own key. These can be given to other learners for them to complete.

Project ideas

- 1 Learners can devise their own keys and create another picture and complete it themselves. They can then explain this to other learners.
- 2 The learners can create a new key and then write a quiz for others to complete using yes/no, true/false questions.

