



Thumbs Up
We were great at
the task
because...



Thumbs Sideways
We were good at
the task
because...



Thumbs Down
We were OK at the
task because...



we took turns by...

we let others have their
say by...

we made shared decisions
by ...

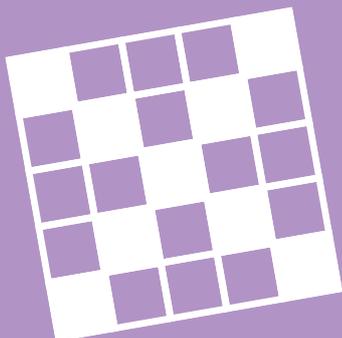
we came up with different
types of clues, e.g....

we used scientific
information and
vocabulary, such as...

we...



Next time we will...



COMINO
FOUNDATION

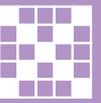
centre for
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education



Crossword Compilers

Teamwork: to co-operate with others

Scientific Communication: to use scientific language to communicate ideas



Generic task

Human Grid



Learning Objective

Teamwork: to co-operate with others

Introducing the task 5 minutes

We often need to work with other people. Working as a team means that we all help each other to do well. This task challenges you to co-operate as a team. You will need to talk to each other, listen and respond, reach agreements and think of others before yourselves. If you're ready for a team challenge... here we go.

Running the task 25 minutes

You need: 9 x A4 pieces of card with the numbers 1-9 written on (laminated if possible), sticky labels with the numbers 1-9.

- 1 Organise the children into teams of nine. One person should act as an observer.
- 2 Place the number cards on the floor in a 3 x 3 square.
- 3 Give everyone a sticky label and ask the children to stand on any square, but NOT the one that matches their sticker.
- 5 Make sure that one square is left empty on the grid.
- 6 When the observer says 'Start', the team must work co-operatively to make sure everyone gets to the square with their number on it. They cannot move into a square that is already occupied and they cannot step off the puzzle.

- 7 When everyone has arrived at the correct square the team shouts 'GRID!'
- 8 The observer will be looking at how the team co-operates, shares their opinions and listens to each other. They should report back at the end telling them two things they did well and one thing they could improve on.

Helpful Hints

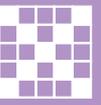
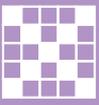
To make it harder you could suggest that:

Moves can only be made vertically or horizontally, NOT diagonally.

Only non-verbal communication can be used.

To transfer Human Grid into a science context, use short questions on the floor cards and answers on the sticky labels, e.g.

Question	Answer
How many planets are there?	Nine
What vitamin do oranges contain?	Vitamin C
How many legs do insects have?	Six
What liquid do plants need to survive?	Water
What is a push or pull?	A force
How long does it take for the Earth to orbit the Sun?	365¼ days
What is the unit that forces are measured in?	Newton
Which organ in the body pumps blood?	Heart
What type of living thing starts every food chain?	Producer



Science embedded task

Crossword Compilers



Learning Objectives

National Curriculum Breadth of Study: 2a

Scientific Communication to use appropriate scientific language to communicate ideas

Equipment

- puzzle books
- science dictionaries

Success Criteria

To be successful the children will:

- take turns and let others have their say
- make shared decisions
- come up with clues using scientific information and accurate scientific vocabulary.

Introducing the task 10 minutes

Explain that this challenge is about working co-operatively to construct different types of clues for a crossword puzzle. Ask for and discuss some examples of different types e.g. picture clues, anagrams, gaps in sentences, questions etc. A puzzle book or the Clue Ideas Sheet can be used to support this. Discuss with the children the idea of working co-operatively in a team and some of the key things that can help this e.g. taking turns, listening carefully, considering other people's ideas and feelings etc. (relate this back to the generic task).

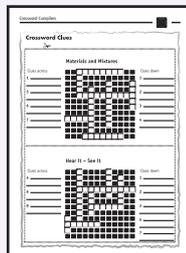
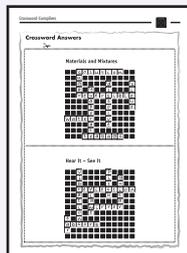
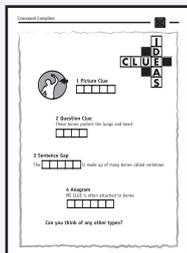
Running the task 40 minutes

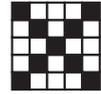
- 1 Organise the children into groups of four or six.
- 2 Read aloud Crossword Compilers. Explain that the activity involves working co-operatively, first in pairs, then as an editing team and, lastly, as a whole class to try the crosswords out.
- 3 Identify which half of the class should work on one crossword and which half on the other. Use the Crossword Answers Sheet.
- 4 Starting in pairs the children should complete the tasks as described on Crossword Compilers. After about 30 minutes teams are allowed to ask other teams for help, if needed, on particular clues.
- 5 All clues must be recorded on the Crossword Clues Sheet or on a separate piece of paper.
- 6 The class can swap crosswords to test them out. Encourage any feedback to be constructive and related to the success criteria for the task.

Reviewing the task 10 minutes

Discuss with the children how well they were able to co-operate in teams to produce their crossword clues. What helped them to co-operate with each other? Did they understand and use scientific language? Involve the children in making an overall judgement about how well they co-operated as a team using the assessment for learning Smart Grid (see back cover).

Resources





There's an emergency at Quizzical Magazine! Two crossword writers, Anna Gram and Ivor Clueless have been struck down by a mystery illness and won't be able to work for a week. The Editor of the magazine writes to say:

Quizzical
magazine

Puzzle Towers
123 Cryptic Road
Sudoku
S12 789

I really hope you can help me. Anna and Ivor were working as a team on two special Science crosswords for the next edition of the magazine. They have made the grids for the crosswords and fitted in the words but they haven't written the clues. It must be printed tomorrow! Can you work as a team to write the clues for me?

What I would like you to do is this:

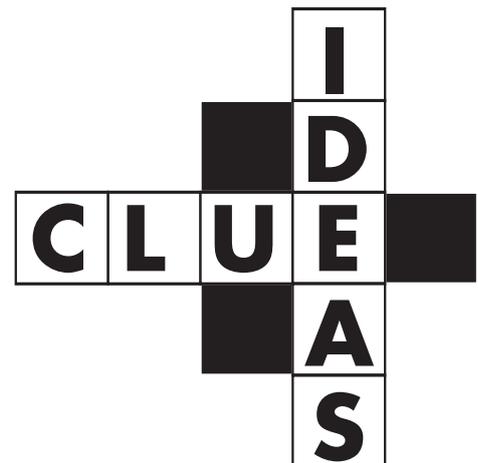
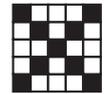
- **Work with a partner to come up with as many clues as you can for one of the crosswords. Use a range of different types of clue.**
- **Join together to form an editing team of four or six. Go through the clues together and decide on the best set. Pick some difficult and some easy clues in a range of styles. Write your clues down on a Clue Recording Sheet.**
- **If you have any clues missing you may be able to do some research by sending a representative to visit another team to discuss ideas. Ask your teacher first.**

When you have finished the clues try your crossword out on another team and get some feedback from them.

Best wishes

Juan Downe
Editor





1 Picture Clue

--	--	--	--	--

2 Question Clue

These bones protect the lungs and heart

--	--	--	--

3 Sentence Gap

The

--	--	--	--	--

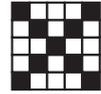
 is made up of many bones called vertebrae

4 Anagram

MS CLUE is often attached to bones

--	--	--	--	--	--

Can you think of any other types?



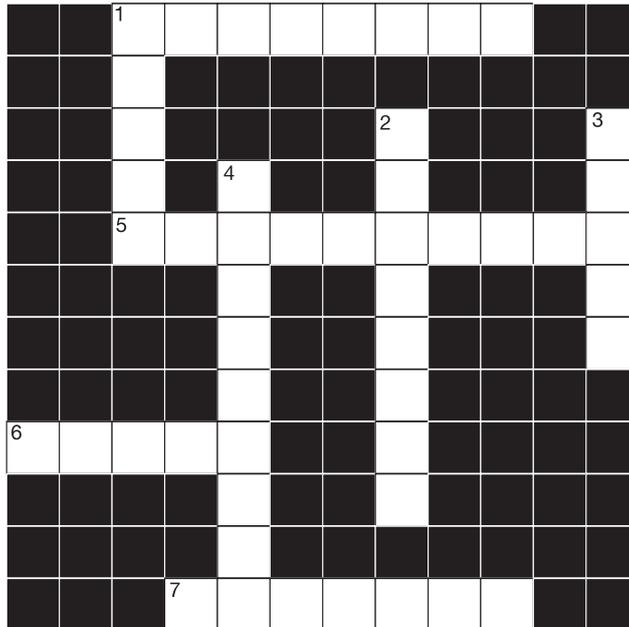
Crossword Clues



Materials and Mixtures

Clues across

- 1 _____
- _____
- 5 _____
- _____
- 6 _____
- _____
- 7 _____
- _____



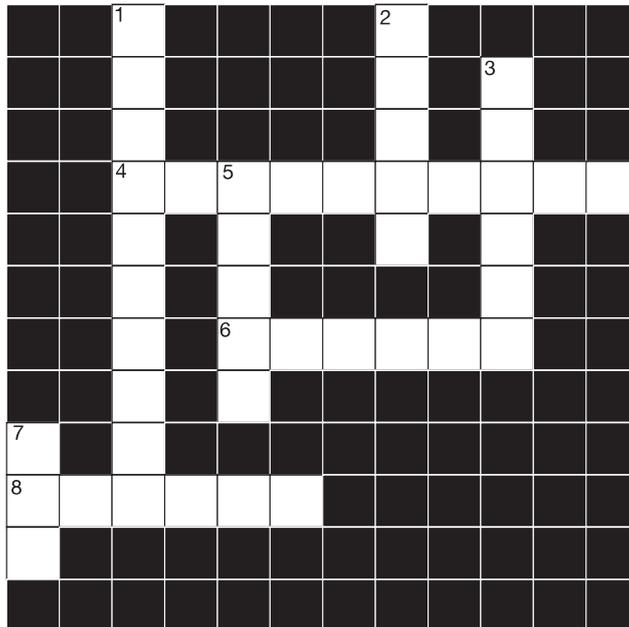
Clues down

- 1 _____
- _____
- 2 _____
- _____
- 3 _____
- _____
- 4 _____
- _____

Hear it – See it

Clues across

- 4 _____
- _____
- 6 _____
- _____
- 8 _____
- _____



Clues down

- 1 _____
- _____
- 2 _____
- _____
- 3 _____
- _____
- 5 _____
- _____
- 7 _____
- _____