

Exercise 1

Vocabulary: Anagrams

Can you work out what the verbs are?

e.g. lofd = fold

1. ovem 3. uct tou 5. tcu logan 7. crudope
2. keta 4. hdol 6. aplest 8. olfd vore

Exercise 2

Vocabulary, Grammar

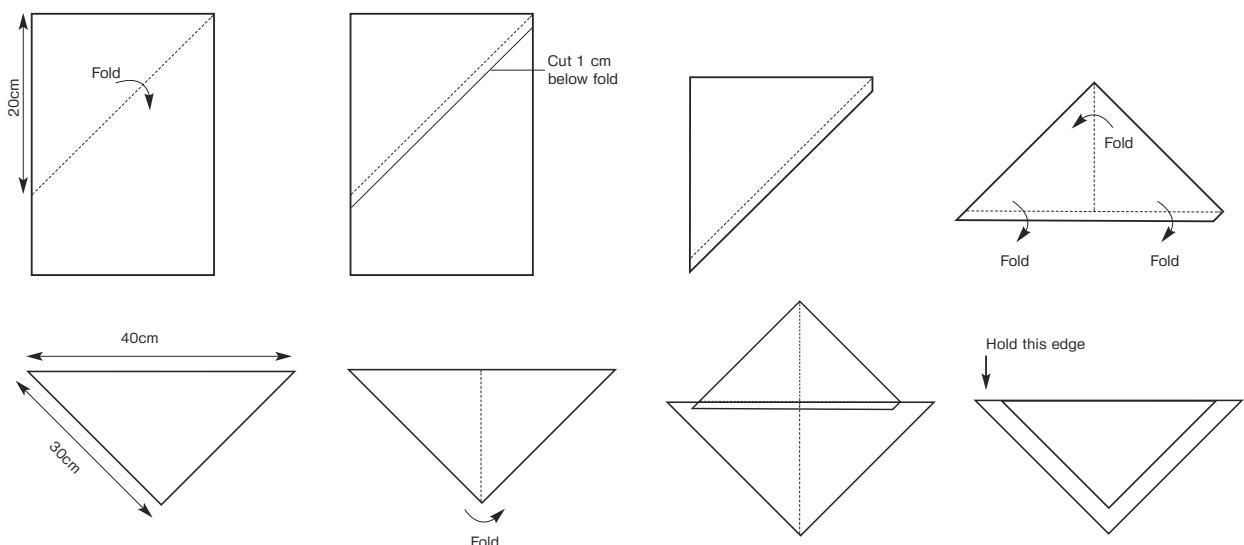
Complete the sentences with the verbs from exercise 1.

- a) _____ a line 1cm away from the fold.
- b) _____ the 1cm flap and then fold the resulting triangle of paper in half.
- c) Fold the banger as shown in Figure X. _____ it by the edge and bring your hand down really quickly towards the floor.
- d) _____ the card down the middle.
- e) Now _____ to the card and _____ a triangle shape.
- f) _____ the paper to the card.
- g) _____ the high-quality writing paper and fold as shown in Figure X.
- h) This will _____ a triangle.

Exercise 3

Reading

Now match the sentences from exercise 2 to the diagrams.



Now look at your experiment sheet and check your answers to exercises 2 & 3.

Exercise 4**Writing: Linking Words**

Now complete this summary of the activity using the words in the box.

after finally first however next then then

(1) _____ we took a piece of high-quality writing paper and folded it diagonally in order to make a triangle. (2) _____ we cut the piece of paper along a line 1 cm from the fold. (3) _____ we folded the triangle in half. (4) _____ that, we took the card and folded it down the middle. We (5) _____ stapled the paper and the card together. (6) _____ we took hold of the edge of the card and brought it down really quickly towards the ground. When we did this quickly enough it made a big bang. (7) _____, if we did it slowly there was no bang.

Gone With a Bang
Adrian Tennant**Learning objectives**

Pupils make a banger and use this to learn how energy can be released and turned into sound waves.

Content summary

Pupils follow instructions to make a simple banger from paper and cardboard. They then use this banger to trap air and then by moving the banger in a downward motion, cause the trapped air to push against the paper creating a bang.

Skills

Reading, speaking, writing

Grammar

Instructional language

Present simple

Linking words/connectors

Vocabulary

Verbs: *fold, hold, cut along, cut out, staple, produce, move, take, fold over*

Connectors: *after, finally, first, however, next, then*

Time needed

45–60 minutes

Age group

7–11

Materials needed

- Sheet of card
- Ruler, pencil, stapler, scissors
- Sheet of high-quality writing paper (not lightweight photocopying paper)

Practicalities

It's important to try and measure the card and paper quite accurately. The last step is key to the success, or otherwise, of the banger. If the movement is too slow, no sound will result. You could also get the pupils to try moving the banger at different speeds and see what the effect is.

Procedure

1. Tell pupils they are going to make a banger and create a loud noise (bang).
2. Introduce/pre-teach the following vocabulary that pupils will need to understand: *fold, cm (centimetre), flap, cut along, cut out, triangular, staple, and edge.*
3. Hand out the experiment sheet and have pupils read out the instructions in class.
4. Give all the pupils the necessary materials (if they are working in pairs or groups give each pair/group the materials).
5. Have the pupils follow the instructions and make the banger. Monitor and help where necessary as it can be quite difficult to follow instructions even when there are diagrams to help.
6. Once the pupils have made the banger have them take turns and try making as big a bang as possible.
7. Hand out the worksheet and ask pupils to work with a partner and do the exercises. These exercises consolidate the vocabulary and grammar used in the experiment and the last exercise gets pupils thinking about the use of linking words/connectors.
8. Check the answers as a class.

Links to everyday life

Ask the pupils to think of other ways in which trapped air is used to do something in real life. Give the students an example, like the air under the wings of a plane helping it go up.

Gone With a Bang
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|---------|------------|--------------|--------------|
| 1. move | 3. cut out | 5. cut along | 7. produce |
| 2. take | 4. hold | 6. staple | 8. fold over |

Exercise 2

- | | |
|--------------|-----------------|
| a) cut along | e) move/cut out |
| b) fold over | f) staple |
| c) hold | g) take |
| d) fold | h) produce |

Exercise 3

1. g) 2. a) 3. h) 4. b) 5. e) 6. d) 7. f) 8. c)

Exercise 4

- | | | |
|--------------|------------|------------|
| 1. First | 4. After | 7. However |
| 2. Then/Next | 5. then | |
| 3. Next/Then | 6. Finally | |