CurriculumVisions VisionMasters

Comprehension Workbook 7

Avalanche!

Mountain disaster

Avalanche

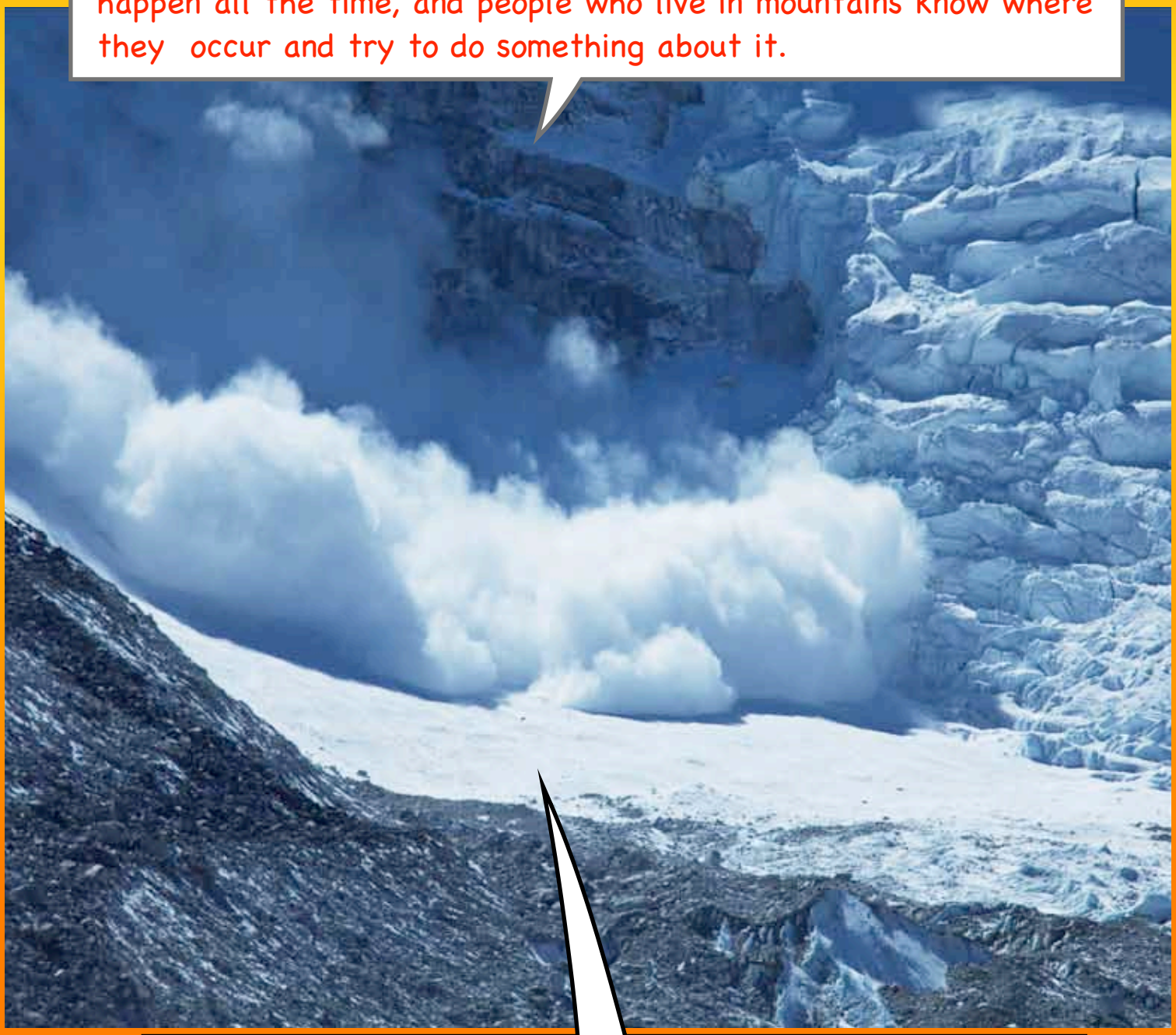
Avalanche tunnel

Find out about the meaning of stories and articles

understand • key words • summarise • sequencing • AF2–3 • AF4–5 • AF6–7 • discuss • create

Avalanche!

Avalanches can cause disasters when they hit people, houses, trains and cars. But avalanches are not rare, like floods. They happen all the time, and people who live in mountains know where they occur and try to do something about it.



Avalanches would not be a problem if people did not live or want to have sports in mountain areas. But as they do, these naturally collapsing banks of snow can cause disaster.

Avalanches are more common on 'fairly' steep slopes. Anything under about 20 degrees and the snow won't move, no matter how much it builds up. Anything over about 40 degrees and the slope is too steep for snow to stick and the slope is bare.

Snow does not build up all at the same time, but builds a bit more after each snowstorm. Then the surface begins to freeze. So when the next snow falls it falls on a hard surface of ice. Think of it like a pack of cards being tilted.

All kinds of things can start an avalanche, such as a rock falling from a slope above, a skier, an explosion, or because the weight of snow has just got too much. Most of the time you can't predict an avalanche and it happens without warning. But it does make sense to make controlled explosions on slopes that seem at risk to clear the avalanche off the slope.

When avalanches start to move, the layers of snow break up and the top powdery snow rises into the air as a giant cloud. It can move faster than an express train. Inside the sliding snow may be hundreds of thousands of tonnes of material, so if they hit buildings or trees, they simply knock them down. The biggest avalanche measured contained 10 million tonnes of snow!

If skiers are in the path of an avalanche they cannot usually get out of the way in time. If they are lucky they are tumbled down with the snow and end up close to the surface. Then rescue teams arrive with sniffer dogs and long thin poles to probe the snow. Many skiers now have electronic transmitters that send out signals and so make rescue faster. Most people who are buried for longer than half an hour die of suffocation, not cold.

Signs are put up in known avalanche areas and snow fences also help to stop the snow before it builds up speed.

1 Understanding words

Before we can understand a story we have to know what all of the words mean. Let's try one...

a Write the sentence in which you found the word 'transmitter'.

b From that sentence, suggest what 'transmitter' means.

c Write a new sentence using the word 'transmitter'.

d Use a dictionary to find words with a similar meaning (synonyms) to 'transmitter'.

e Draw a small picture showing what you think 'transmitter' means.

Try this for other words, too.

2 Finding key words

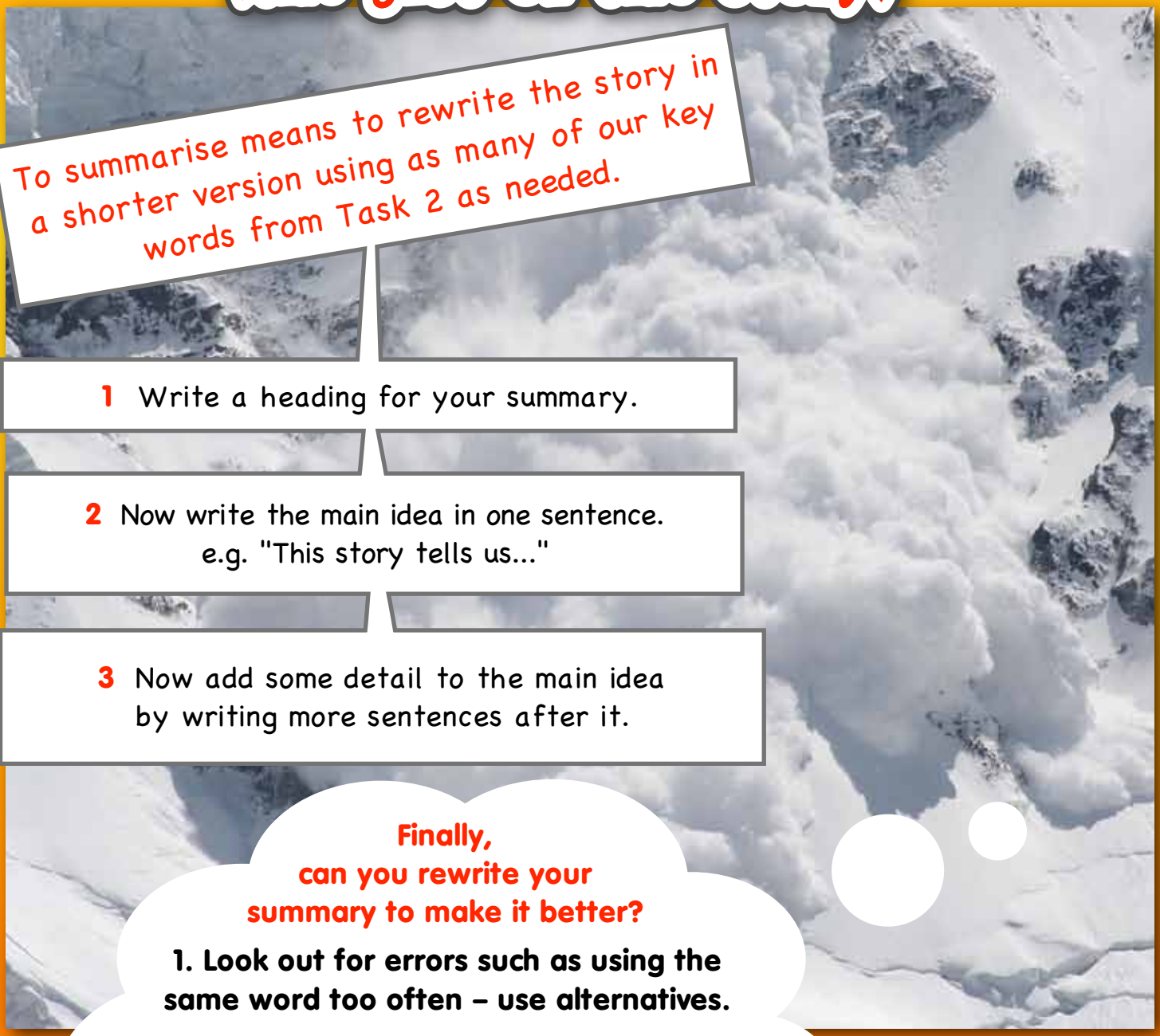
Next, we need to find the key words that tell us what the story is about...

Read the story and underline the key words. Write the most important of these key words in a list like the one below. Write next to it a word that means a similar thing (a synonym). You don't have to use all the spaces, but you should not use more.

Key word	Synonym (similar word)
Example: avalanche	collapsing bank of snow

3

Summarising
(the gist of the story)



To summarise means to rewrite the story in a shorter version using as many of our key words from Task 2 as needed.

1 Write a heading for your summary.

2 Now write the main idea in one sentence.
e.g. "This story tells us..."

3 Now add some detail to the main idea by writing more sentences after it.

Finally, can you rewrite your summary to make it better?

1. Look out for errors such as using the same word too often – use alternatives.

2. Make sure you have summarised the author's purpose in your OWN words.

3. Make sure your summary is in a logical order.

4. Is your summary informative AND interesting to others?

There is nothing wrong with rewriting; even the best authors rewrite their work.

Sequencing

Sequencing means getting the events in the right order. Write these sentences in the correct order, so they make sense.

When avalanches move, they can be faster than an express train.

Avalanches can have thousands of tonnes of snow in them.

Anyone buried for longer than half an hour has little chance of surviving.

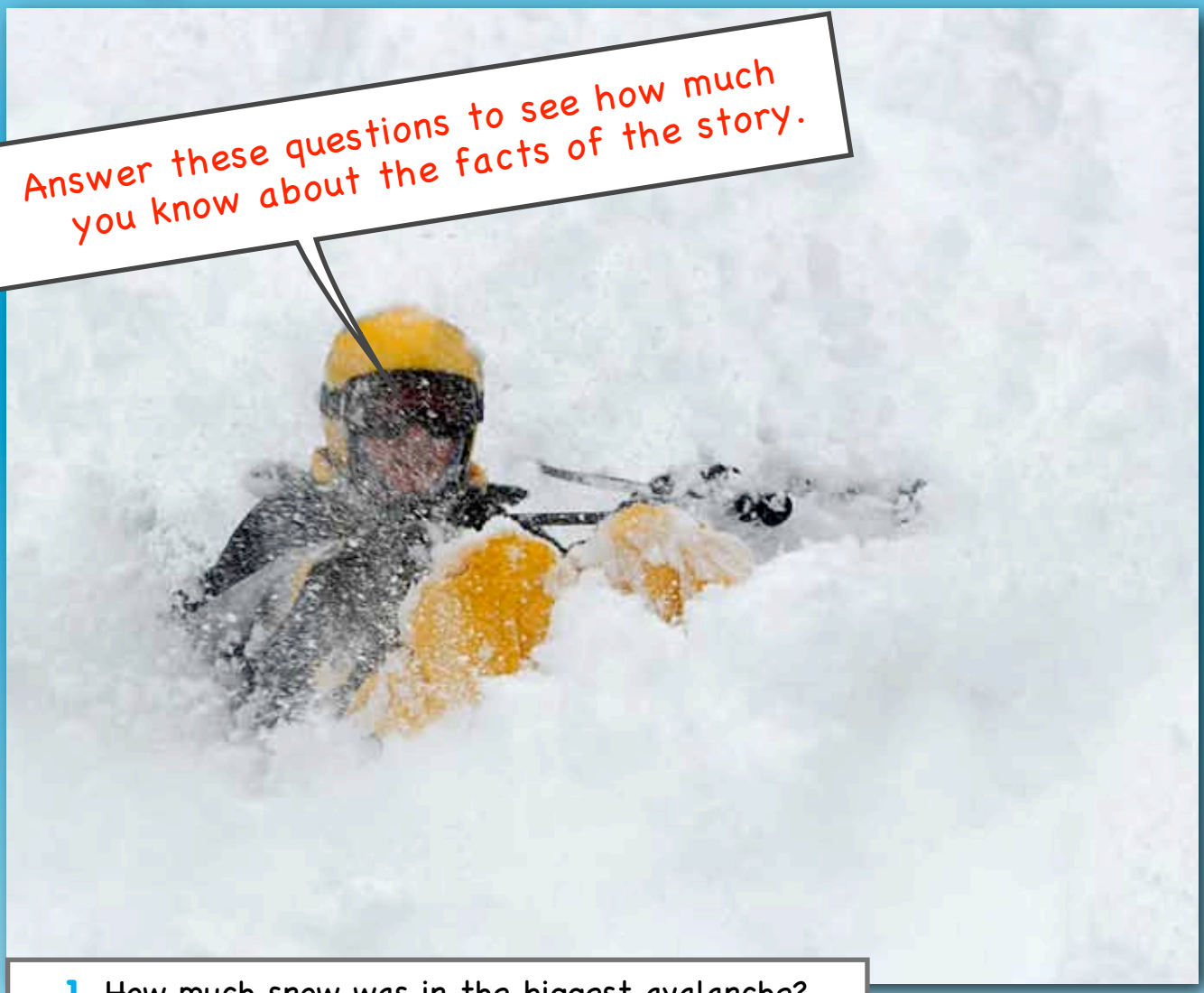
An avalanche forms on slopes between 20 and 40 degrees.

An avalanche forms in places where layers of snow build on each other like a pack of cards.

Dogs and probes are used to look for anyone buried.

An avalanche is a collapsing bank of snow that moves at great speed.

5 Get to the facts



Answer these questions to see how much you know about the facts of the story.

1 How much snow was in the biggest avalanche?

2 How fast do avalanches move?

3 How long can you survive if buried in an avalanche?

4 What is used to find buried people?

5 What can start an avalanche?

6 Whys and wherefores

Answer these questions to see how much you know about the meanings in the story and how it was written.

1 Why do people use dogs for rescue?

2 On what steepness of slope do you find avalanches?

3 Why do you not find avalanches coming from very steep slopes?

4 What happens to people who are buried in an avalanche?

7 Opinions matter

Answer these questions to give your views and to develop the story.

1 Does it make sense to be in areas where avalanches are common?

2 What kinds of things can be done to stop avalanches?

3 If you were skiing in an area of avalanches, what do you think would be the single most important piece of safety equipment?

4 When might you set off an explosion in an avalanche area?

5 What would you do if you came across a sign saying avalanche hazard: avoid it or chance your luck? Explain your reason.

Snow fences to stop avalanches.

8 Talking it through

It often helps if a group of people get together and discuss a problem.

Discussion topic: Avalanche warning

What do you think would be the best way to keep deaths from avalanches as low as possible? Think of some other kinds of notices that could be used. Remember, these are not for the general public, but for expert skiers who should know better anyway!

9 Make a story...

When you read a description it often gives you ideas about how the event might be described differently.

The friendly furry face

You have been trapped in deep snow by an avalanche. After several minutes you find a pair of large paws have cleared away the snow and a furry face is now looking at you. Make up a story from when you were skiing to when this rescue happened.

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