

Reading Comprehension 1

An extract from Jazz Harper: Space Explorer

MARS YEAR 84

Nearly twenty Mars years ago, the extraordinary story of two children who discovered life on Mars heralded the beginning of a new era for the Marineris Colony and all humans living and working on the Red Planet.

Now, after many years, researchers have uncovered documents from the Marineris archives which shed new light on the discovery and the events that led to it.

Those documents are published here together for the first time. What follows is a story like no other..

28th May 2060

Dear Brand-New Diary of Adventure,

Today was our very last visit to Gran before our epic mission to Mars. Mum and I travelled there on the air tram, like usual. Did you know that air trams travel really, really fast? I looked it up on the map app on my webspectacles as we sped over the tall tower blocks and green parks. At one point, we got up to 147mph!

I asked Mum if that's how fast we'll be travelling through space. She said that the rocket will be much faster - over twenty thousand miles per hour!

Twenty thousand! That's mega-fast. That's stomach-churning, brain-melting fast. Sometimes, when we're on the air tram, I play games to make the journey more fun. Today, I imagined that I was a space pilot, speeding through the galaxy. Outside the windows, stars and planets zoomed past, blurring into streaks of light. An alien spaceship approached with lasers beaming but I was ready to zap it into another dimension as soon as it got into range.

"Pow! Pow-pow-pow! Pow!"

"Oh Jazz, you're not shooting aliens again," said Mum as the other people on the tram stared. "We like aliens!"

I explained that they had us cornered in the outer spiral arm of a distant galaxy and that I had no choice.

Mum said that I should at least try to bring one back alive so that she could study it. That's what Mum does for a living. She's an extraterrestrial-life researcher — an alien scientist.

I performed a lightspeed U-turn to capture an alien fleeing the shattered spaceship in a life raft.

"Hmmm," Mum said, pretending to investigate my captured alien. "It has bug eyes, seven legs, a spiky exoskeleton and liquid brains. This is like nothing I've ever seen before, Jazz. We could win the Galactic Discovery Prize for this."

"Do you think that's what the alien life on Mars will look like?" I asked.

Mum laughed. "I doubt that they'll have seven legs. In fact, I

doubt that they'll have any legs at all."

I spent the rest of the journey thinking about Martians with tentacles and suckers, and some that crawled over the ground like slugs. When the air tram finally got to Sunset Heights, we released our seven-legged alien back into the wild and hopped onto the platform.

Gran lives in one of those old-fashioned retirement villages from the 2020s: all glass and steel and curving walls. When she isn't racing her friends around the courtyard on her hover scooter or throwing street parties on weeknights, she's in her top-floor flat, gazing through her binoculars at the happenings down below or inviting people over for curry so hot that it blows your head off.

I could smell Gran's curry as soon as we got upstairs. Even before the front door opened, my eyes watered.



Answer the following questions, using the text to help you

1. In what year is the first section of the story set?

2. Find and copy a phrase or sentence in the first section that builds anticipation of the story that comes next and entices the reader to find out more.

3. What transport does Jazz use to visit Gran?

spaceship

car

air tram

hover scooter

4. How do you know that this is the typical way in which Jazz travels to visit her Gran?

5. Find and copy a phrase which reveals that Jazz is not actually capturing aliens in this extract.

6. In what kind of accommodation does Gran live?

7. Look at the line: "I could smell Gran's curry as soon as we got upstairs. Even before the front door opened, my eyes watered." What does this suggest about Gran's curry?

8. Mum and Jazz appear to have a fun relationship and get along well. What evidence is there to support this?

Reading Comprehension 2

Frederick Catherwood

Using a camera lucida (a tool used to ensure accurate drawing of proportion and perspective), Frederick Catherwood produced meticulous and precise drawings of the ruins of the Maya civilisation during his visit to Copan, in modern-day Honduras, in 1839.

His detailed drawings provided Victorian people with an insight into life in the Maya period, which meant they were able to speculate about the Maya kings, gods and writing (hieroglyphs).

Although it is clear that these drawings are impressive, some people question their importance because they were drawn by an artist rather than photographed.



Quick Questions

1. What did Frederick Catherwood use a camera lucida for?

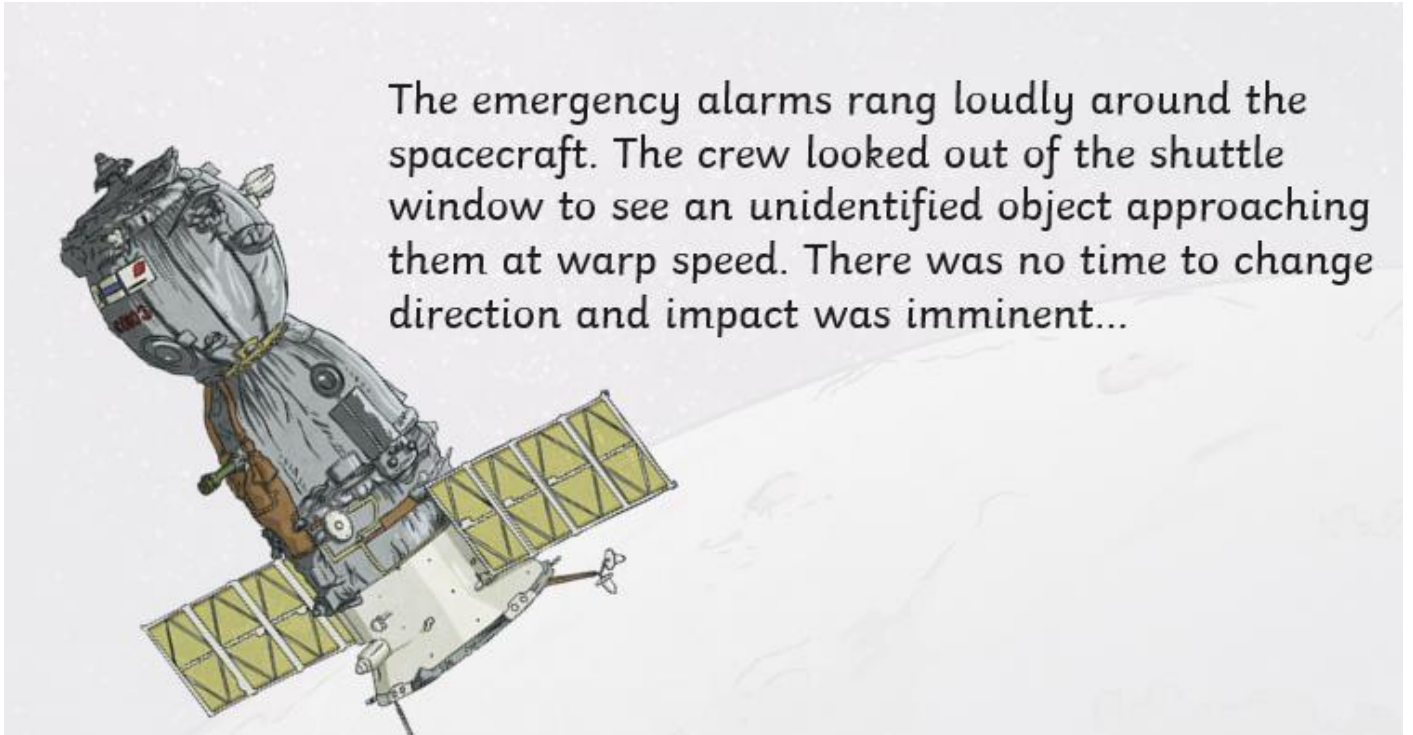
2. Find any two words meaning **exact** or **clear**.

3. Why did Victorian people have to **speculate** about Maya life?

4. Some people questioned the drawings' importance. Do you think they are important? Why?

Writing Task 1

Continue the science fiction story...



The emergency alarms rang loudly around the spacecraft. The crew looked out of the shuttle window to see an unidentified object approaching them at warp speed. There was no time to change direction and impact was imminent...

Think carefully about

Vocabulary

Conjunctions

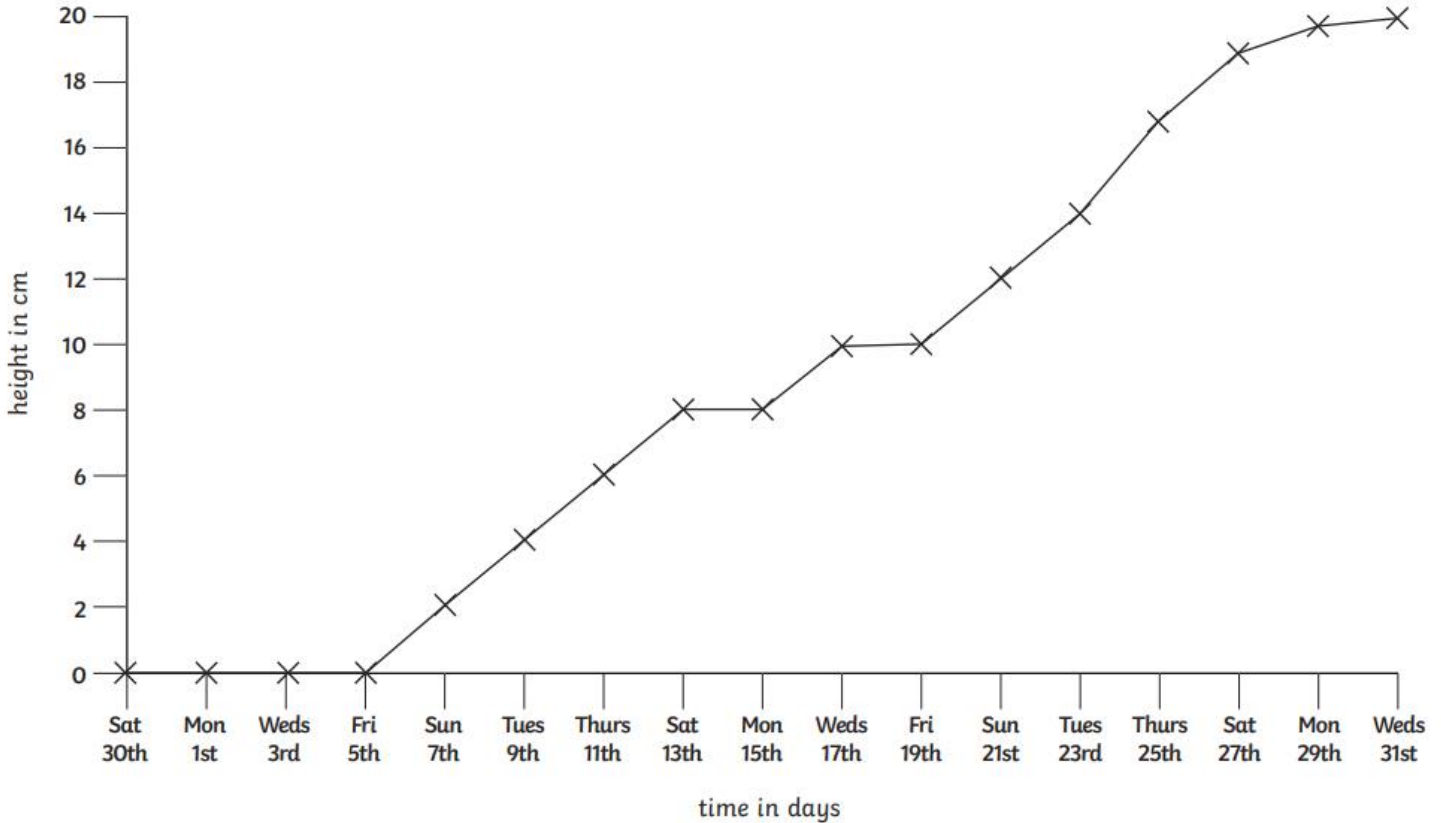
Openers

Punctuation

Mathematics

Sunflower Line Graph

Here is a line graph showing a sunflower's growth. It was planted on Saturday 30th July and its height was measured every 2 days.



1. How many days did the plant take to grow 18cm?

2. What is the height difference between Friday 19th and Thursday 25th?

3. What is the height of the plant on these days:

a) Thursday 11th

b) Friday 19th

c) Monday 29th

4. Why do you think there is no measurement in the first week?

Word Problems

Anne has £8.97.
She buys some fruit. Now she has £5.34.

How much did her fruit cost?

Toby has saved up £52.85.
His big sister has saved up £123.60

How much have they both saved up altogether?

For every 7 eggs that Chicken A lays, Chicken B lays 12.

If Chicken A lays 84 eggs, how many eggs does Chicken B lay?

Can you find two numbers that add up to 250?

123 222 109 78 115
 239 86 72 148
201 136 129 97 114

Sudoku 6 x 6 Puzzles

Each row and column contains all the digits 1 to 6.

	2		3	6	
			5		2
1	5				4
2		3	1	5	6
4	3		6	1	
6	1		4	2	

	5			4	3
6				1	5
		6		3	
		3		6	
4	6	5	3		1
3			4	5	

6	3	2	4		
4		1	6	3	
	6	3	1		
1		5		6	
5			3		4
					6

5	2	4		3	
			5		2
	4		6	1	5
6	5	1		2	
			2	5	3
2			4	6	1

Science

International Day for Biological Diversity is observed on 22 May every year to increase awareness and understanding of the issues of biodiversity, which is the term we use for the variety of animals, plants, fungi, bacteria, and other intertwined life forms within any ecosystem.

Choose one or more of the following activities and upload photographs to Class Dojo.

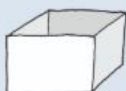
Make a simple hedgehog house

wildlife
watch



You will need:

- Medium-sized plastic storage box



- Stanley knife



- Leaf litter



- Dry grass or straw



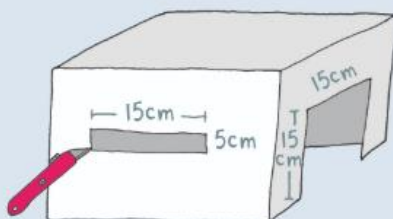
- Carrier bag



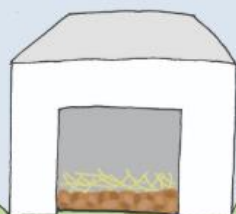
- Twigs and dry leaves



- 1 Cut two side air vents and an entrance into the plastic box.

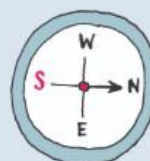
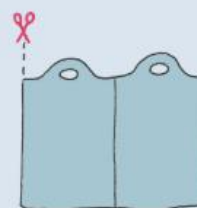


- 2 Put some leaf litter inside the box, with clean, dry grass or straw on top.



- 3 Tuck the box near a hedge (with the entrance facing south if possible).

- 4 Put an opened-up carrier bag over the top of the box, then cover with twigs, dry grass and leaves.



Start a nature table

Start a nature table at home, your workplace or school to share your wild findings with colleagues, friends and family. From feathers, mosses, pine cones, fossils to animal bones and egg shells – make it as interesting as possible!



Illustration: Corinne Welch © Copyright Royal Society of Wildlife Trusts 2015

How to make seed bombs

You will need:

- Meadow flower seeds or seeds collected from the garden



- Peat-free compost



- Water



- Powdered clay (from craft shops - use clay soil if you can't find any)



- Mixing bowl



1 In a bowl, mix together 1 cup of seeds with 5 cups of compost and 2-3 cups of clay powder.



2 Slowly mix in water with your hands until everything sticks together, then roll mixture into firm balls.



3



4 Now for the fun bit – plant by throwing your seed bombs at bare parts of the garden!



Illustration: Corinne Welch © Copyright Royal Society of Wildlife Trusts 2015



How to make a butterfly feeder

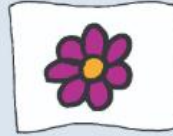
wildlife watch



What you need:

- card 
- plastic bottle top* 
- scissors 
- cane 
- sellotape 
- a pot with soil in it 
- cotton wool 
- colouring pens or pencils 
- sugar 
- water 

1 Draw a flower on your card and colour it in with bright colours, then cut it out.



2 Stick a plastic bottle top in the centre.

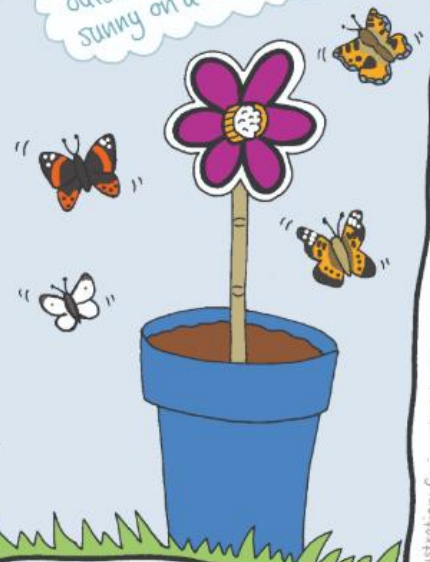


Put your feeder outside, somewhere sunny on a warm day.

3 Use sellotape to stick the cane onto the back of the flower, and stand it in the pot of soil.

4 Mix the sugar with some water and soak the cotton wool in the solution.

5 Put cotton wool inside bottle top.



www.wildlifewatch.org.uk

*Use an old plastic bottle top for this, and always recycle after use.

Illustration: Corinne Welch © Copyright Royal Society of Wildlife Trusts 2015

How to go rockpooling

wildlife watch



You will need:

- Buckets or clear Tupperware containers 
- A field guide or ID sheet 
- Sturdy footwear 
- Camera and/or pens and paper 
- An adult to help you keep an eye on the tide

1 Half fill your buckets or containers with sea water. Have more than one to keep bad tempered animals apart!

2 Use your hands to carefully lift crabs, starfish and other sea creatures into your containers. Watch out for spines and pincers! Nets can cause damage to rockpools and are best avoided.

3 Use a guide to identify your creatures. Take notes, sketch them or photograph them.

4 Return the animals to where you found them when you've finished looking and wash your hands before eating.

Be careful not to damage delicate animals

Don't prise limpets, anemones or seaweed from their rocky homes

Don't take living plants and animals home with you

Replace rocks to the same position once you've looked underneath



Illustration: Corinne Welch © Copyright Royal Society of Wildlife Trusts 2015

Writing Task 2

Linked with this week's science activity, choose one of the following biomes and research the type of life that lives there.

Pick three plants or animals and write a short report about each, including a labelled diagram of each organism.

Marine

Freshwater

Tundra

Tropical Rainforest

Temperate Forest

Savannah

Grassland

Desert