TEST A **YEAR 5**

The Old Toyshop
A History of Time
Some Time Underground

Name: _____

Class: _____

Date: _____

Raw Score **Scaled Score**

Teacher's Notes:

THE OLD TOYSHOP

Did you know that before computer games, there were plastic toys with batteries... and... before that... there were toys that you had to wind up? I've still got some in my toyshop. I know they're not as thrilling as computer games, but I like them.

Monkey

This is special. It's clockwork. Yes, you wind it up with a key and it spins two balls on plates. Also, it moves its head as if watching them. It has a metal mechanism inside, but it has a soft face made of fabric and it has a shirt, trousers and jacket as well as a hat. He's about the same age as me now. I'd never sell him. Hah! There I go again, referring to it as 'him'!

Juggling Elephant

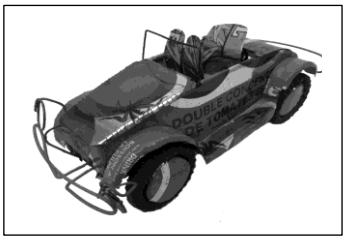
I call this a juggling elephant, though it doesn't actually juggle. When you turn the key, the flaps at the top of its trunk spin around. At the same time, four coloured balls travel up the wire spiral on the right, slide down the little chute and fall into the round tub held by the elephant. Amazing, don't you think? Yet, if you look underneath, you can see how it works. First, you turn its key and tighten the metal spring. Then, as the spring unwinds, it turns a rod hidden inside the elephant's trunk and that makes everything move.

Clown

This clown is just one example of comical characters you might come across riding a three-wheeled bike. The clever thing about it, however, is that it doesn't just scoot off in one direction. It stops and starts and changes direction when you least expect it. Little kids always want to take one home.

Russian Princess

What you can't see in this photograph are the tiny wheels on the bottom of the princess's tin-plate dress. This enables her to spin around like a dancer, as if she had a mind of her own. She is often decorated in what looks like traditional Russian clothes. A collector on the look-out for this sort of toy would find them painted in different colours and patterns.



I don't know what to call this car made by a boy from a poor area in South Africa. He collected old food cans, flattened them and cut them into shapes to fit together. It doesn't move on its own, but the boot and bonnet open up. Brilliant!

1. Look at the introduction in the form of Tim's speech bubble.
What is the main point he is making? **Tick one** box.

He owns a toyshop. ☐

Computer games are thrilling. ☐

There are different types of toys. ☐

1 mark

2. Which toy do you think is Tim's favourite?

_____

1 mark

3. What does the Monkey do when you wind it up?
Tick two.

It smiles. ☐

It spins balls on plates. ☐

Its body twists and turns. ☐

It moves its head. ☐

2 marks

4. Tim talks about two of his toys as if they were people.
Which **two**?

1) _____

2) _____

2 marks

5. In his description of the Juggling Elephant, Tim explains how it works. Number the different steps in the correct order.

☐ **the spring unwinds**

☐ **everything moves**

☐ **you turn its key**

_____
1 mark

6. In the description of the Juggling Elephant, the word **rotates** is used. **Circle** a word that has a similar meaning.

bends **turns** **tightens**

_____
1 mark

7. Tim mentions **two** sorts of customers who would be interested in his toys. Who are they?

1) _____

2) _____

_____
2 marks

8. Look at the information about the Russian Princess. Write down **two ways** in which Russian Princess toys might be painted differently.

1) _____

2) _____

_____
2 marks

9. More than once, Tim hints at how much he likes these toys.
Write down **two** things he says that show you how he feels.

1) _____

2) _____ _____

2 marks

10. Which **two** toys move in unexpected directions?

1) _____

2) _____ _____

1 mark

11. Tim and the Monkey both have a hat. Tim says there is something else that they have in common.
What is it?

_____ _____

1 mark

12. Tim says **two** parts of the car move. What are they?

1) _____

2) _____ _____

1 mark

13. Why do you think the South African boy made his car from flattened food cans?

_____

_____ _____

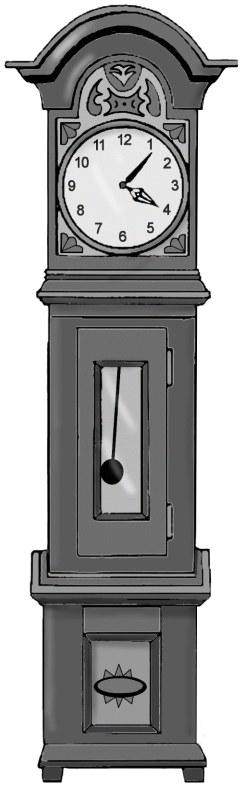
2 marks

14. Help Tim out by thinking of a good title for the car.

_____ _____

1 mark

..... A HISTORY OF TIME .....

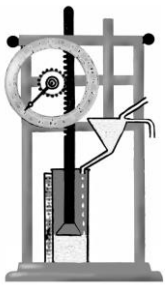


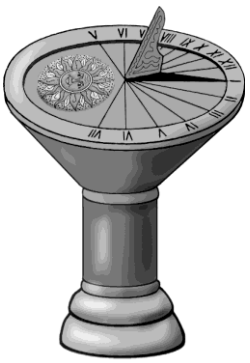
Before time was measured in seconds, minutes and hours, people relied on the sun, the moon and the seasons. Work started at sunrise and finished at sunset. Changes in the seasons told farmers when to plant and when to harvest. As there were no clocks, it would have made no sense to say: "I'll meet you at two o'clock."

People watched how the sun seemed to move across the sky. They realised that smaller amounts of time could be measured by the changing position of the shadow of a stick pushed into the ground: the sundial! This led to more accurate versions. An Egyptian sundial from 800 BC still exists, but they were known and used by astronomers even before this date.

The trouble with sundials is that they are no use at night or when the sun isn't shining. Also, at different times of the year, the sun is higher or lower in the sky, affecting the shadow formed by the sundial. The Greeks and others tried to solve this problem. They invented the ***clepsydra*** or water clock. The problem with this, however, was that trying to regulate the drips of water that fell into a tank, which then turned the clock pointer, was impossible.

Their popularity with some scientists and wealthy people continued, but they saw them as toys rather than something that told the time.





The hourglass works in a similar way to the water clock, using sand instead of water. People often used them to time the length of sermons from the church pulpit. They are still used today as egg-timers and in board games. They have the advantage of being able to be used at night by the light of the moon or a candle.

The creation of an accurate mechanical clock was the dream of astronomers and inventors in the 13th and 14th centuries. The clock in Salisbury Cathedral, installed around 1386, is still working. Having no clock face, it operates a bell that strikes the hours. (The word *clock* is similar to the French word *cloche*, meaning *bell*.)

The invention of mechanical clocks not only led to the clocks that we are familiar with today, but also to our idea of time, itself. With the more recent addition of digital clocks and watches, as well as other displays on mobiles, computers, car dashboards and in public places, we are more aware than ever of time passing, time lost, time wasted and no time to do everything that we would like. Are we like the White Rabbit in *Alice in Wonderland* – always in a hurry?

1. Before clocks, how would people have worked out the length of a working day?

_____ _____
1 mark

2. 'People watched how the sun **seemed** to move across the sky.' Why has the writer used the word **seemed**?

_____

_____ _____
1 mark

3. Describe how a simple version of a sundial works.

_____

_____ _____
1 mark

4. What are the **two** main problems with sundials?

1) _____

2) _____

_____ _____
2 marks

5. What is another name for a **clepsydra**?

_____ _____
1 mark

6. The problem with water clocks was 'trying to **regulate** the drips of water that fell into the tank'. **Circle** a word that is similar in meaning to **regulate**.

stop control design

1 mark

7. Water clocks were not good at telling the time. The text suggests the type of person who continued to enjoy them. Write down **one** type of person.

_____

1 mark

8. Give an example from the text of how hourglasses are used today.

_____

1 mark

9. In what way is an hourglass better than a water clock?

_____

_____

1 mark

10. One of the earliest mechanical clocks was installed in Salisbury Cathedral. How is it different from clocks today?

_____

_____

1 mark

11. Look at the last paragraph. What is it mainly about? **Tick one** box.

Mechanical clocks have been replaced by digital clocks. ☐

Clocks make us more aware of time passing. ☐

There is no time to do everything. ☐

1 mark

12. Read the last sentence again. How is it different from the rest of this historical account? **Tick one** box.

The writer is expressing a personal view. ☐

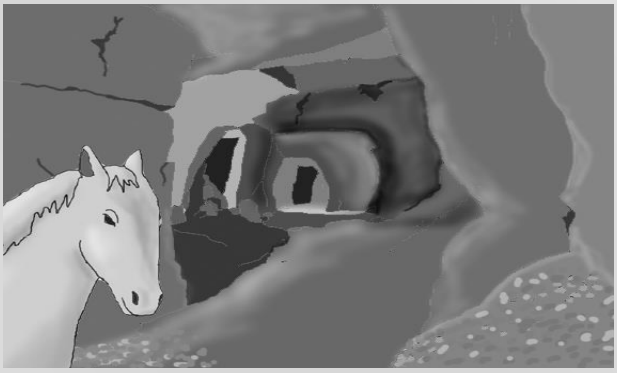
The writer is recommending *Alice in Wonderland.* ☐

The writer is ending with a joke. ☐

1 mark

Some Time Underground

part 1



"I don't want to waste any time telling you to stop chatting and listen," says the guide. Not that anybody, apart from Luke, that is, is chatting. His voice is bouncing round the cavernous stone mine like a mad bunny. They call them quarries here in Bath, but they're like underground mines and just a tad spooky, if you ask me.

"He's looking at me, Joanie. I never said a word."

"Yeah, right." There's something about my own echo – the words circling round and coming back that makes my head buzz. Or maybe it's the thought of being underground and standing next to a water barrel for the horses that used to haul out the blocks of limestone. Heavy blocks that were shaped and cut to build all the houses here, ever since Roman times. All of those houses above the earth that left miles and miles of corridors and caverns under the earth. It's making my brain go funny.

"Of course, where you're all standing was once an ocean. Perhaps your teacher has already explained that limestone is the result of dead sea creatures sinking to the bottom of the ocean, layer upon layer." The voice of the guide sounds far away.

The water barrel is encrusted with its own stalactites and stalagmites. Years of rainwater seeping through the limestone roof of this man-made cave. I have to put my hands on it.

"Joanie?" says Luke. I can see his outline, but his face is in shadow. "You all right?"

"These mine workings," says the guide, "have been stable for a hundred and fifty years, but, in case of emergencies, I'll blow this whistle and you will all walk, I said *walk*, behind me to a safe place. And another thing..."

I can hear some of what he is saying, but there is a tingling in my fingers, spreading up my arms to my neck. He's talking about how these spaces beneath the earth were used for storage, and, especially, for ammunition during the war. And there's something else.

"A ghost, Joanie. Did you hear what he said about an old miner and his horse?"

There is a sudden and ear-shattering rumble of falling rock, or as if a train were racing towards us – straight towards us – down one of the many tunnels. There is panic! The whistle! Elbows, scuffling feet, screams, the whistle, rumbling. I'm pushed to the floor. Then silence. No train, no rock fall and no one. I'm alone. Completely alone.

part 2

I have my torch, but which path do I take? "Luke!" His name comes firing back from all directions, like a chorus of jeering kids. I can hear something else: sounds of work going on, like crates being shifted, men talking. I pick my way over chunks of stone, guessing at corners, while all the time terrible shadows leap around the walls.

The voices are getting closer and there is more light. Up ahead, men are working to unload a train. A freight train has stopped inside a railway tunnel, beside an entrance to this stone mine. Crates are being manhandled from an open carriage onto an old jeep.

"Jenkins!" The shriek, so close to my ear, makes me jump. "Jenkins, stop slacking and get over there. That train's got to be on its way before the enemy gets suspicious." The man is wearing some sort of uniform. He has some stripes on his sleeve. More than that, I can't say, because, somehow, a sense of urgency has taken me over. I don't know who Jenkins is, but those crates have to be unloaded as soon as possible. The contents are priceless. They must not get into the wrong hands. I know that much. Somehow.

We work as fast as we can – these soldiers and me. As two of us lift off the final crate, I stare down at the royal seal on the lid. Something precious inside. I let my side slip, ripping off one of the metal buttons from the jacket of the soldier helping me. He smiles and shakes his head. Then I bend down to pick it up, but he is no longer there. The jeep has vanished. There is no train. No opening to a railway tunnel.

I wander, maybe for an hour, desperately lost. Somebody must come looking for me. The batteries in my torch are fading and so are my hopes.

One of the shadows is moving. A human shape. I think my heart will leave my body. For the shape speaks. "You lost, dear?" I think my mouth is open. I can't tell. I can't hear anything coming out. "Don't worry. It happens. Charlie, here, he's old and can't see very well, but he'll take you back."

Charlie is white and seems to shimmer. I hold onto his mane and off we trundle through pitch black corridors until we reach the water barrel. I'm so thankful to recognise something, I want to feel it to make sure it is real. A voice whispers in my ear, "You'll be fine now." When I turn, there's Luke and the others. A glimmer of light and Charlie melts into the darker corners.

"Now," says the guide, "remember I was saying that the government and the army stored a lot of top-secret stuff down here. Well, there was something kept here during the Second World War... you'll never guess..."

I lean over to Luke. "Crown jewels," I say.

Luke laughs and gets a hard stare from the guide. "Don't be so stu..." he whispers.

"Crown jewels," interrupts the guide. "Only a few people at the time knew about it. The perfect hiding place. Box Tunnel is a few miles in that direction. The train would enter, stop, then unload, before trundling out at the other end. Top secret."

There's a puzzled expression on Luke's face. I smile as my fingers trace the outline of the metal button in my pocket.

1. Who are being shown by the guide round the underground limestone quarries?

_____ _____
1 mark

2. When Luke says, 'I never said a word', why does Joanie say, 'Yeah, right'?

_____

_____ _____
1 mark

3. How have these underground caverns been created?
Tick one:

natural caves where people have lived	☐
holes in the rock eroded by the sea	☐
rock has been removed to build houses	☐

_____
1 mark

4. In the 3rd paragraph, beginning **'Yeah, right'**, there are **two** phrases describing how Joanie feels that suggest some strange adventure is about to happen to her. What are those phrases?

1) _____

2) _____ _____
2 marks

5. The guide talks about limestone. Describe how it is formed.

_____

_____ _____

1 mark

6. When Joanie puts her hands on the water barrel, she hears only some of what the guide is saying. What sensations does she feel in different parts of her body?

1) _____

2) _____ _____

2 marks

7. In the last paragraph of **Part** 1, write down an example of a simile being used to create a sense of danger.

_____ _____

1 mark

8. At the beginning of **Part 2**, Joanie says she can hear different sounds. **Tick** the sound that she **does not hear**.

crates being shifted	☐
rock falling	☐
men talking	☐

_____

1 mark

9. Who do you think shouts 'Jenkins!' at Joanie?

_____ _____

1 mark

10. Write down **one** of the clues you used to answer **question 9**.

_____

_____ _____

1 mark

11. The writer doesn't say who the **two** are who help Joanie when she is lost. Who do you think they are?

1) _____

2) _____ _____

2 marks

12. At the end of the story, Luke is puzzled as Joanie smiles and touches the metal button in her pocket.
We don't know what she is thinking.
What could she be thinking?

_____

_____

_____ _____

3 marks