

# Year 7 - ISE Foundation

Big Question 9 "Why are buildings important?"

Trinity Reading Sample Test

## Task 1 - Long Reading: Green Skyscrapers

#### Paragraph 1

Today, the cities of the world have many skyscrapers. These very tall buildings are a common sight. In recent years, building designers are not only thinking about the height of these structures. They are also thinking about the health of our planet. That is why they're designing "green" skyscrapers.

#### Paragraph 2

What makes a building green? Green buildings don't use a lot of oil, coal, or gas. They use other sources of energy, such as the wind and the sun. It takes a lot of time, research, careful engineering plans, and special tools to build a green skyscraper.

### Paragraph 3

The Bahrain World Trade Center (BWTC) in Manama, Bahrain, is a green building. It contains wind machines that are like giant airplane propellers. They turn very fast, and this creates power, providing electricity for the building. The BWTC also has pools of water, which make the area around the building look nice. More importantly, the water in the pools evaporates, and this keeps the air around the building cool. To keep air cool on the inside, the building has special window glass, which directs sunlight away from the building.

#### Paragraph 4

On the other side of the world, there are plans for a new green skyscraper in Mexico City. The Torre Bicentenario is going to be over 300 meters tall, and it will use recycled water. Like the Bahrain World Trade Center, this building will have special windows to keep it cool.

### Paragraph 5

A very famous skyscraper in the United States is going to be green, too. The Empire State Building is getting new windows that keep the air cool in the summer and warm in the winter. The new windows will save about \$4.4 million in energy costs every year. Once, people asked, "What's the tallest skyscraper in the world?" Today, the question is more likely to be, "What's the greenest skyscraper in the world?"

#### **Questions 1-5**

The text above has five paragraphs (1–5). Choose the best title for each paragraph from A–F below and write the letter (A–F) on the lines below. There is one title you don't need.

1. Paragraph 1	
2. Paragraph 2	
3. Paragraph 3	
4 Paragraph 4_	
5 Paragraph 5	

- A. A New Kind of Skyscraper
- B. Making an Old Building Green
- C. Clean Energy and Skyscrapers
- D. Skyscrapers and Pollution
- E. Using Wind for Power
- F. A New Green Skyscraper



### **Questions 6-10**

Choose the five statements from A–H below that are TRUE according to the information given in the text above. Write the letters of the **TRUE** statements on the lines below (in any order).

_	
6	A. Green buildings use a lot of oil
7	B. The Bahrain World Trade Center uses wind power for electricity
8	C. The Torre Bicentenario will use pools of water to cool air.
9	D. The Empire State Building is going to be a green building.
10	E. The wind machines in BWTC provide air conditioning.
	F. Recycling water is important in green buildings.
	G. Building a "Green Skyscraper" requires a lot of planning.
	H. Special windows can help cool a skyscraper.

### Questions 11-15

Complete sentences 11–15 with a word, phrase or number from the text (maximum three words). Write the word, phrase or number on the lines below.

11. Wind machines provide	for the Bahrain World Trade Center.
12. The Torre Bicentenario will reach a heigh	t of over meters.
13. The Empire State Building will have new	to help save energy.
14. The changes in the Empire State Building	will save \$4.4 million in
every year.	
15. It is important to use wa	ter in Green Skyscrapers.





### **Task 2: Multi-text Reading**

**Questions 1-5** (one mark per question)

Read questions 1-5 first and then read texts A, B, and C.

As you read each text, decide which text each question refers to. Choose one letter – A, B, or C and write it in boxes 1-5. You can use any letter more than once.

<b>TA7</b>	h;	ah	text.	
vv	ทา	cn	rexr.	

<b>1.</b> states the negative aspects of skyscrapers?	
<b>2.</b> shows the height of the skyscrapers?	
<b>3.</b> says where each skyscraper is located?	
<b>4.</b> talks about the first skyscrapers?	
<b>5.</b> lists interesting facts about skyscrapers?	

#### Text A

### **History of Skyscrapers**

When people think of skyscrapers, they may think of New York City, a city with many highrise buildings. It comes as a surprise that Chicago, not New York, is the home of the skyscraper. The first high-rise building was constructed in 1884, and it was nine floors high. This is very short compared to today's buildings, but it was the first building with more than six floors.

In the  $19^{th}$  century, engineers began to use iron and steel to support the buildings, so they could be taller. With this technology, the walls could support more windows, so the buildings were quite pleasant.

However, there was still one major problem: how could people reach these high floors? The solution was the invention of the elevator in 1853. They were installed with electricity in the 1880's.

### **Text B**

# **Pros and Cons of Skyscrapers**

### **Pros**:

- They occupy small amounts of space on the ground
- Many people can live or work inside them
- They have beautiful designs, and architects can be very creative with the structures
- They can have be good for the environment and conserve energy

### Cons:

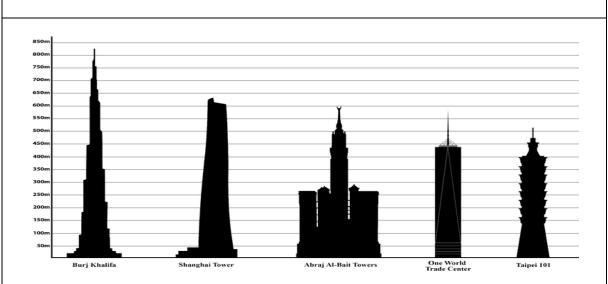
- Can be very dangerous in a fire or emergency situation.
- Less sunlight reaches the ground.
- Very expensive to build and maintain.
- Many people and cars in a small area causes transportation problems.



# **Text C**

The World's Five Tallest Skyscrapers

Name	Location	Height	Number	Completed	Interesting Fact
			of Floors		
Burj Khalifa	Dubai, United Arab Emirates	828 metres	163	2010	Has the world's highest restaurant on 122 <sup>nd</sup> floor
Shanghai Tower	Shanghai, China	632 metres	123	2015	Designed to be efficient and save energy, has a twisting design.
Abraj Al-Bait Clock Tower	Mecca, Saudi Arabia	601 metres	120	2012	5-story shopping mall; parking garage for 1.000 cars
One World Trade Center	New York City, United States	541,3 metres	104	2014	Original name was "Freedom Tower." Located where the twin towers were before the terrorist attacks.
Taipei 101	Taipei, Taiwan	509 metres	101	2004	Tallest "Green building" in the world; designed to survive earthquakes, monsoons, and tsunamis.





### **Questions 6-10** (One mark per question)

Choose the five statements from A–H below that are TRUE according to the information given in the texts above. Write the letters of the **TRUE** statements on the lines below (in any order).

	A. Skyscrapers are expensive to build.
•	B. Burj Khalifa is 40 floors taller than the Shanghai Tower.
6	C. The first skyscraper was built in New York City.
/	D. Skyscrapers occupy a small amount of space on the ground.
8	E. One World Trade Center is the 3 <sup>rd</sup> tallest building in the world.
9	F. Elevators were installed in skyscrapers in the 1880's.
10	G. Engineers used concrete to support the buildings in the 19 <sup>th</sup> century.
	H. Skyscrapers can cause transportation problems.

## **Questions 11-15** (One mark per question)

The summary notes below contain information from texts A–C. Find a word or phrase from the box at the bottom to complete the missing information in gaps 11-15. Remember to look back at the texts when you choose your answer from the word bank.

Write your answers on the lines below. You don't need all the words and phrases.

<u>Summary Notes</u>			
History			
<ul> <li>The first skyscraper was built in (11)</li> </ul>	•		
<ul> <li>It was nine floors tall.</li> </ul>			
• Electric (12) were installed	d later in the 19 <sup>th</sup> century.		
Pros and Cons			
<ul> <li>Occupy less space on the ground</li> </ul>			
• Can be dangerous to evacuate many peopl	e in an emergency.		
• Cause problems with (13)	• Cause problems with (13) because of many cars in a small area.		
World's Tallest			
Burj Khalifa is the (14) building in the world.			
Shanghai Tower is the newest of the five tallest buildings.			
<ul> <li>Taipei 101 is the oldest, built in the year (15)</li> </ul>			

<u>Word Bank</u>				
Shortest	Chicago	Tallest	Fires	2015
Transportation	Elevators	2004	Earthquakes	China



Answer Key - Long Reading	Answer Key - Multi-Text Reading	
Part 1 1. A 2. C 3. E 4. F 5. B	Part 1  1. B  2. C  3. C  4. A  5. C	
Part 2 (In any order) 6. B 7. D 8. F 9. G 10. H	Part 2 (in any order) 6. A 7. B 8. D 9. F 10. H	
Part 3 1. Electricity 2. 300 3. Windows 4. energy costs 5. recycled	Part 3 11. Chicago 12. Elevators 13. Transportation 14. Tallest 15. 2004	

