

# 1001 INVENTIONS

DISCOVER THE MUSLIM HERITAGE IN OUR WORLD

## PRIMARY SCHOOL ACTIVITY SHEET

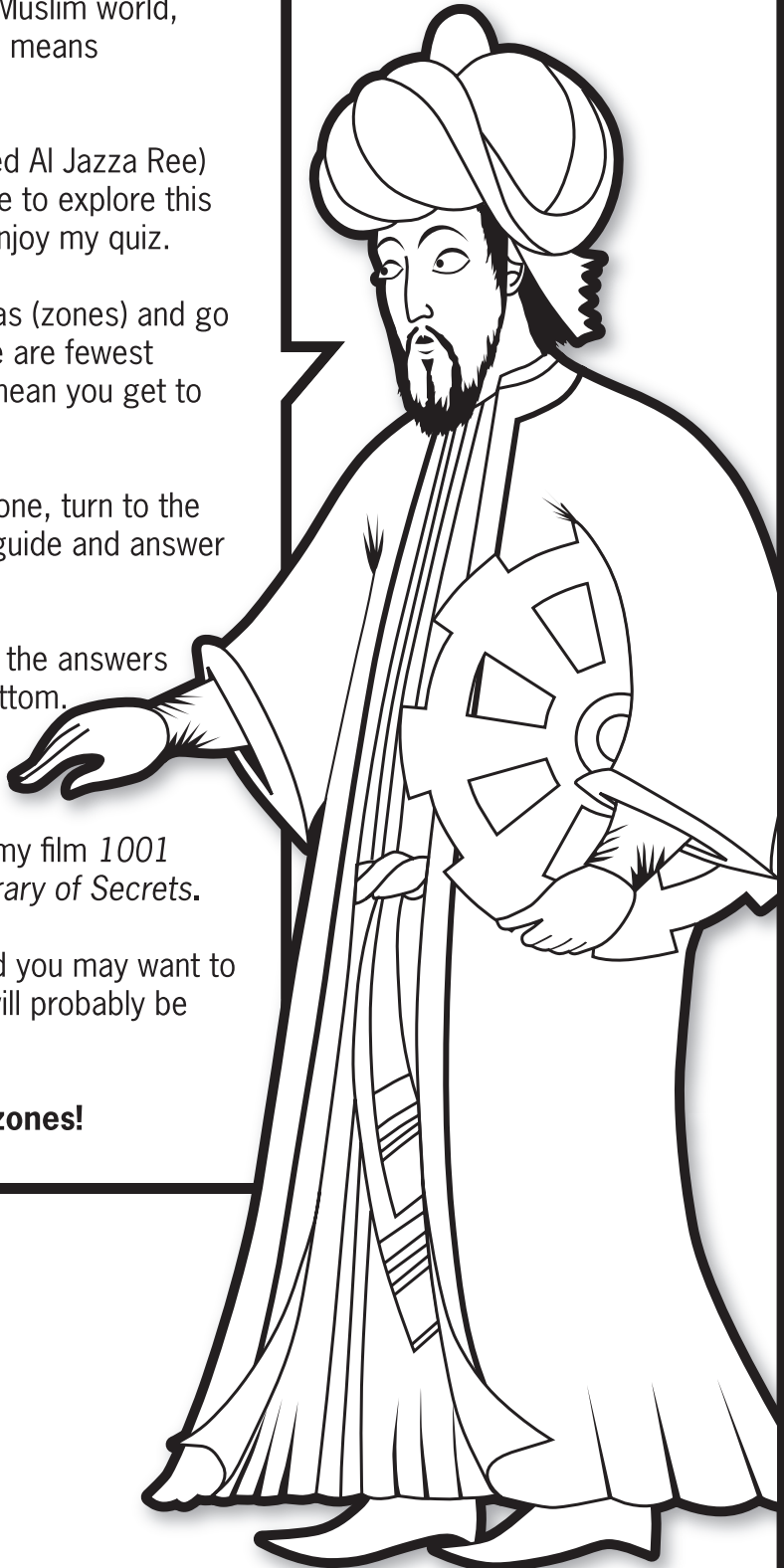
Hello, or as we say in the Muslim world, 'Assalaam Alaikum' which means 'Peace Be with You'.

I am **Al-Jazari** (pronounced Al Jazza Ree) the inventor. Come with me to explore this wonderful exhibition and enjoy my quiz.

- Look at the seven areas (zones) and go to the one where there are fewest people first. This will mean you get to use things easily.
- When you get to the zone, turn to the matching page in my guide and answer the questions.
- Don't cheat! I have put the answers upside down at the bottom.
- Keep your own score.
- Don't forget to watch my film *1001 Inventions and the Library of Secrets*.

You can work together and you may want to work with an adult – you will probably be quicker than them anyway!

**Now enjoy each of the zones!**



# HOME ZONE

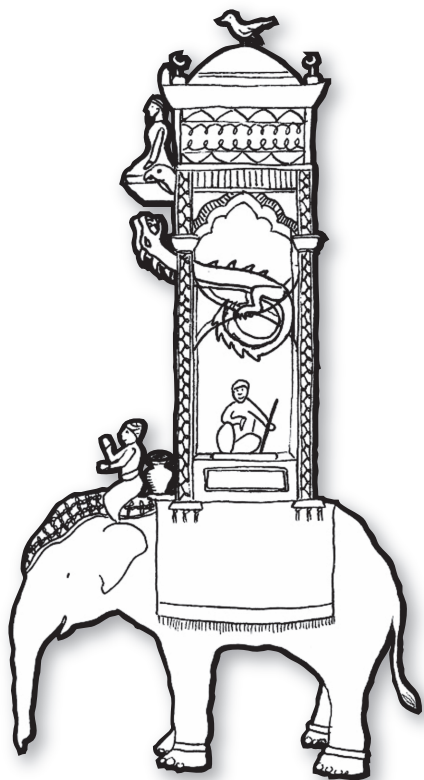
The Home Zone shows how everyday life is influenced by people from a thousand years ago - like **Ibn al-Haytham**.

- 1 What did he do that helped lead to the invention of the camera? Did he:
- Invent film?
  - Work for a TV company?
  - Discover how the eye works?

In the Home Game interactive, find all the things that were influenced by Muslim civilisation. There are 20 to discover. How many did you find in the time?

I scored  in this game.

Below is a picture of my famous Elephant Clock.



- 2 What country does the elephant remind you of?
- 3 What country do the dragons remind you of?

How many did you score out of three?

Answers  
1. c 2. India but I will give you a point if you said Africa (which is not a country). 3. China

# SCHOOL ZONE

In the School Zone, find out how some of our lessons today are based on important discoveries made in Muslim lands. Do you like school? I did but I suppose I was very clever.

This is **Fatima al-Fihri**. She is one of the most famous women from the Muslim world. Try to find out:

- 1 Where did she come from?
  - a) Morocco
  - b) Mexico
  - c) Manchester
- 2 Was she:
  - a) Rich?
  - b) Poor?
  - c) Neither?
- 3 Did she start:
  - a) A school?
  - b) A hospital?
  - c) One of the first universities?

You can look at the panels, pick up the phone or watch the videos.

Find the Word Routes game. On one side, you see English words, and on the other the original word in Arabic, Hindi or Persian. Can you write down two words with their English meaning?

Now, one of my own favourites. Look for the wheel with the handle – spin the wheel fast!

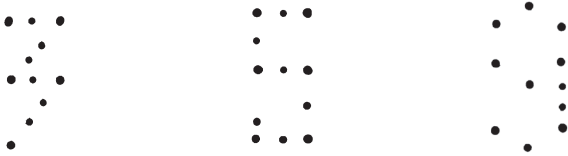
- 4 What three words light up?

1)

2)

3)

People in Muslim lands were using these chemicals over a thousand years ago.



Join up the dots here.  
What numbers do they make?

How many did you score out of four?



Answers  
1. a 2. b 3. c 4. 3, 5, 9 – one point for each

# MARKET ZONE

Welcome to the Market Zone - where you will find me again. I'll tell you about travel and trade in Muslim civilisation.

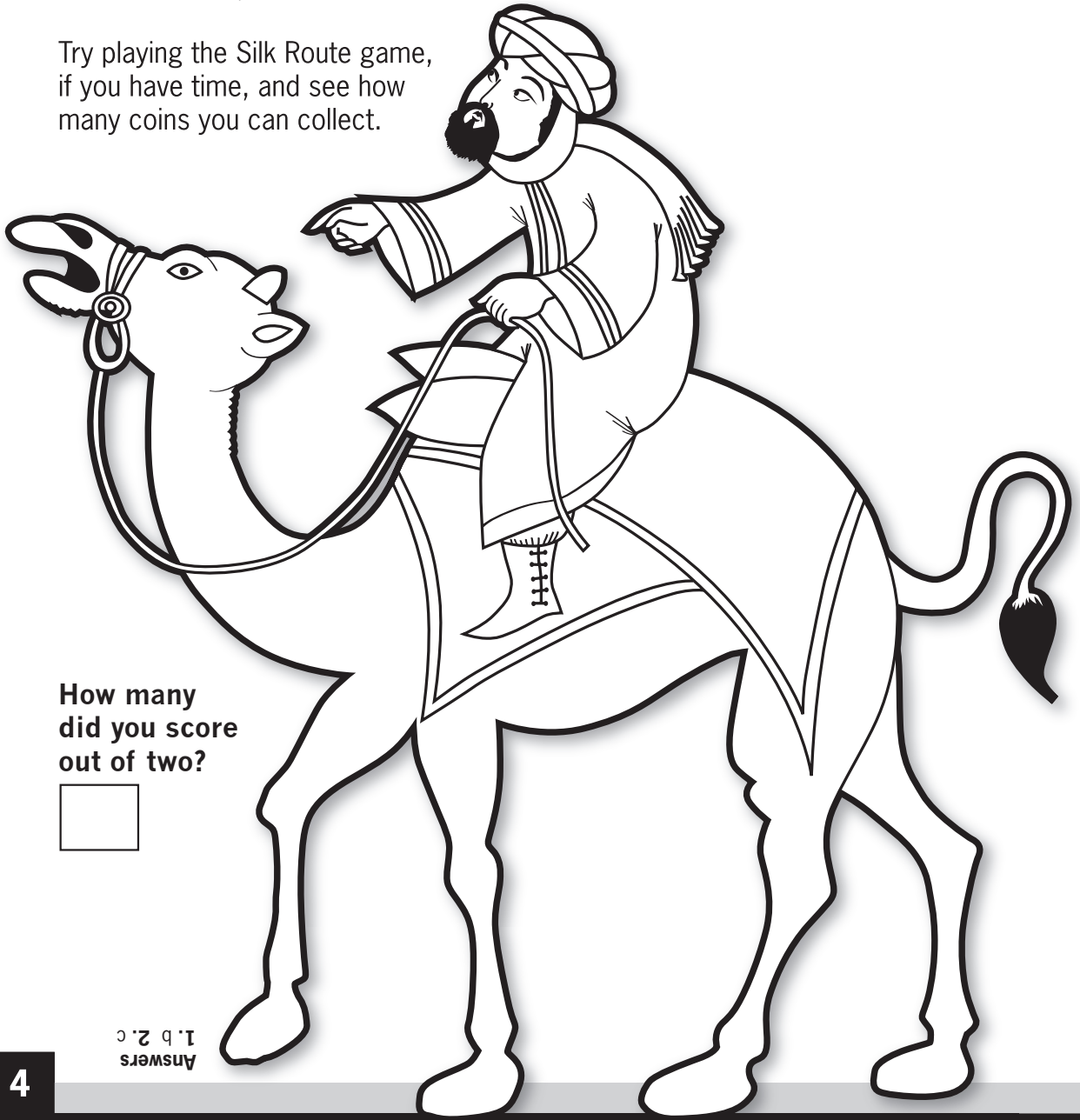
Can you answer these two questions?

- 1 **Taqi al-Din** invented a water pump, and this helped us grow some new crops. Were they:
  - a) Carrots and turnips?
  - b) Peaches and apricots?
  - c) Potatoes and cabbage?
- 2 Muslims produced oil and wrote about how to use it. Without it, we couldn't have:
  - a) Milk shakes?
  - b) Smoothies?
  - c) Petrol?

How did you get to the museum today? How long did it take you? I bet you did not come by camel or travel for 29 years.

Well, a famous traveller called **Ibn Battuta** (lb in bat too tah) did. He travelled 75,000 miles and visited 44 countries.

Try playing the Silk Route game, if you have time, and see how many coins you can collect.



How many did you score out of two?

# 1001 INVENTIONS AND THE LIBRARY OF SECRETS

I am the star of this film. What do you think of my performance?  
But more importantly, can you answer my questions?

- 1 **Ibn al-Haytham** discovered how our eyes work and this led to an important modern invention. What was it?
- 2 What did **Abbas ibn Firnas** forget when he tried to fly?
- 3 What material do we use in hospital that **Al-Zahrawi** developed?
- 4 What was my greatest invention?
- 5 Why do you think the boy said it was a United Nations clock?

How many did you score out of five?



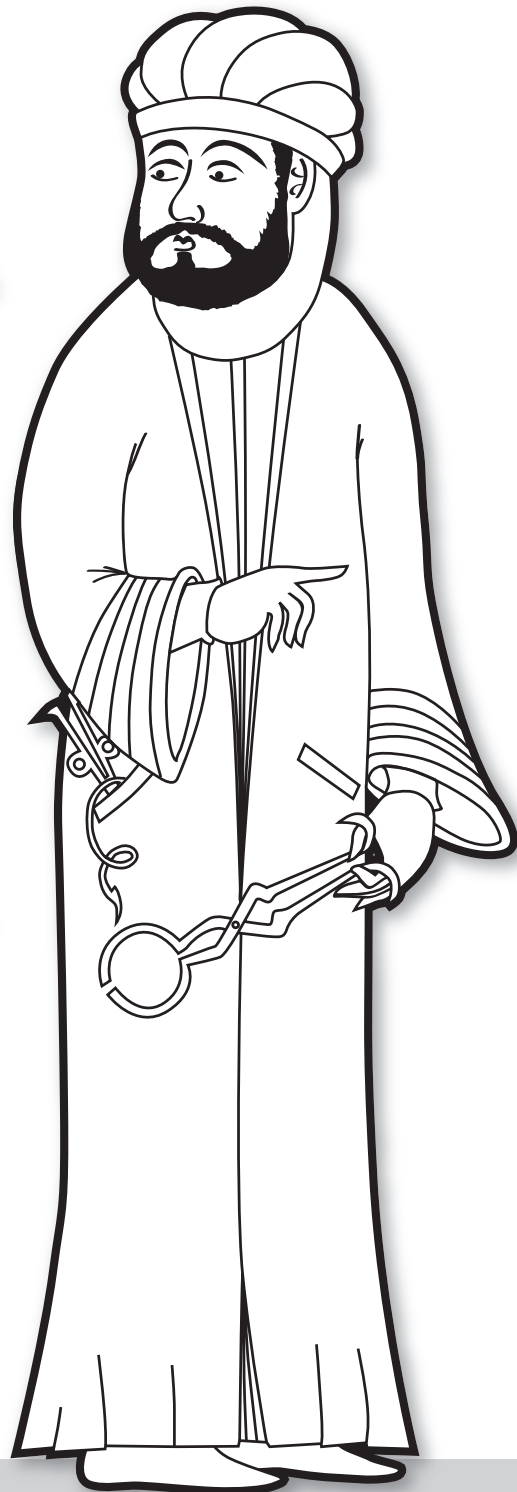
**Answers**  
1. The camera 2. A tail fin - useful for landing  
3. Catgut 4. The Elephant Clock  
5. Because it had Greek, Egyptian, Indian,  
Arabian and Chinese bits in it. I will be kind and if  
you have any two of these you can get a mark.

# HOSPITAL ZONE

Have you been to hospital? I hope not. In the Hospital Zone, you can find out how people like **Al-Zahrawi** (Al za ra wee) were improving health care centuries ago.

Can you answer?

- 1 Who wrote the first book about tools used in surgery?  
a) Doctor Who?  
b) Al-Zahrawi?  
c) Your own doctor?
- 2 Al-Zahrawi developed the use of stuff to sew people up after surgery. Was it called:  
a) Horse hair?  
b) Haircut?  
c) Catgut?
- 3 Have a look at this picture. Can you spot 3 things that are the same in both pictures?



How many did you score out of five?

Answers 1. b 2. c 3. Knife called a scalpel, medicine book, needle and thread (one point for each)



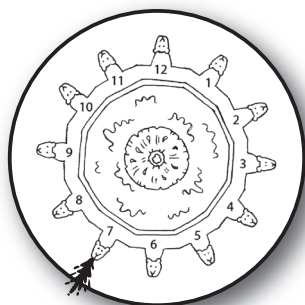
# TOWN ZONE

In the Town Zone, **Sinan** the architect from Turkey will explain the things Muslims did to make towns better for us all to live in. Try to answer these questions:

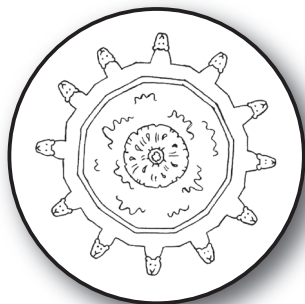
- 1 What does an architect do?
  - a) Mend cars
  - b) Design buildings
  - c) Design handbags
- 2 How many buildings did Sinan design?
  - a) Over 250
  - b) Over 470
  - c) Over 1000

Have a look at the Lion Fountain. It was used to show the time. Water would pour out of one of the 12 lions' mouths, to show which hour it was.

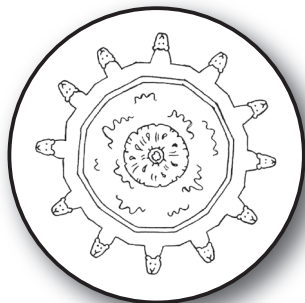
This is what the fountain would have looked like at 7 o'clock.



- 3 What would the fountain look like at 4 o'clock?



- 4 What would the fountain look like at 9 o'clock?



How many did you get out of four?

Answers

1. b 2. b

Ask Your teacher/parent/adult to check 3 and 4.

# WORLD ZONE

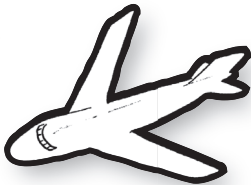
In the World Zone meet **Abbas ibn Firnas** - a man who tried to fly long before aeroplanes. See if you can answer these questions.

- 1 What did the Chinese Muslim **Zheng He** do? Did he:
  - a) Sail the world in an enormous wooden ship?
  - b) Design a flying contraption?
  - c) Draw a map?
- 2 Who drew an early important map of the world? Was it:
  - a) Al-Smith
  - b) Al-Patel
  - c) Al-Idrisi

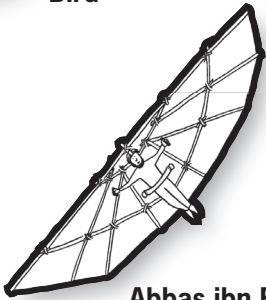
Look up and see Abbas ibn Firnas in flight



Bird



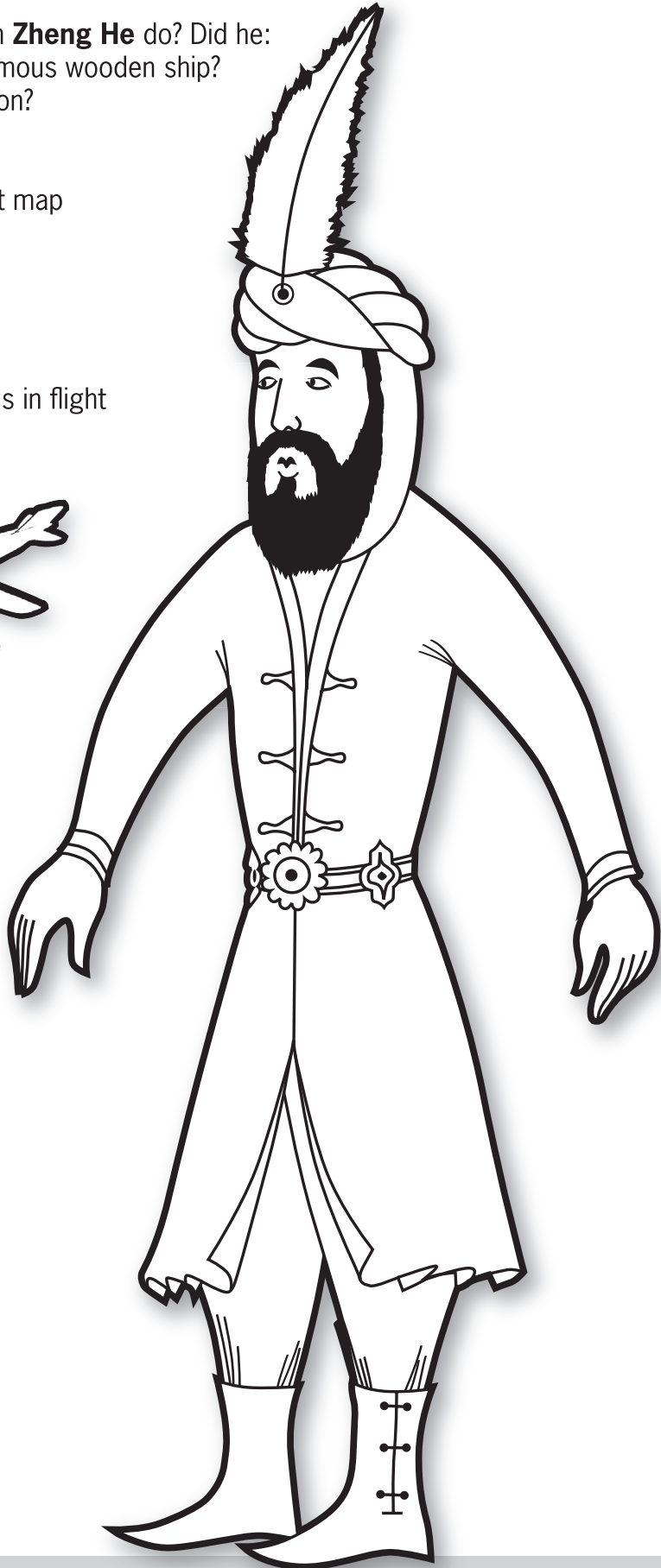
Plane



Abbas ibn Firnas

- 3 What do they all have to help them fly?

How many did you get out of three?





# UNIVERSE ZONE

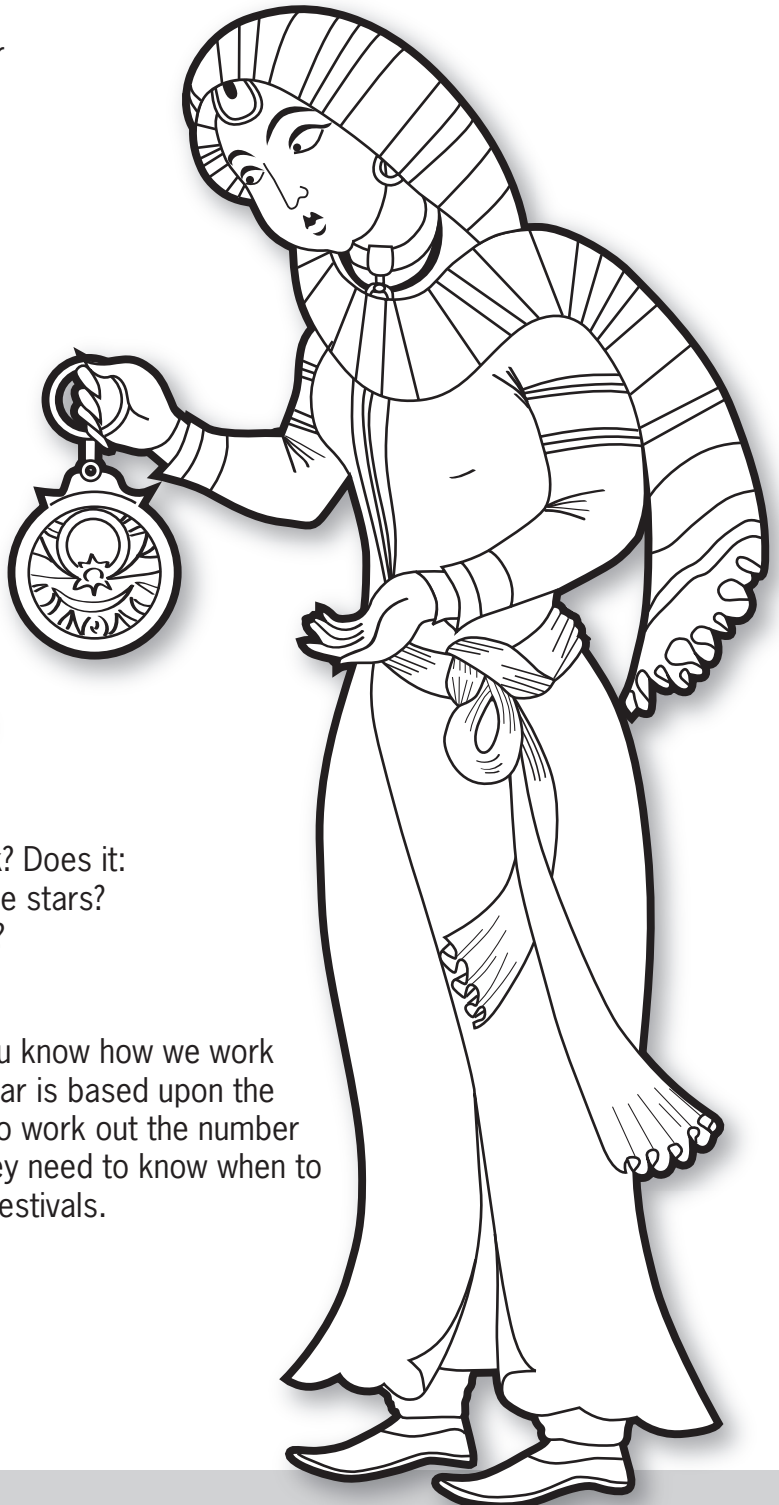
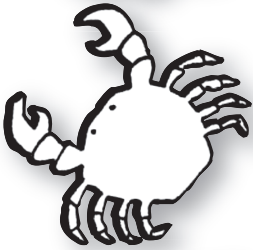
In the Universe Zone, find out how Muslims have helped us to understand our universe. You can meet **Merriam al-Ijliya** who made astronomical instruments.

- 1 Do you know what the study of stars is called? Is it:
- a) Astronomy
  - b) Aston Villa-ology
  - c) Antology

Play the Star game – How many constellations (star patterns) can you find?

Many of the names of the constellations started off in Arabic.

- 2 Find the English name for each pattern.



- 3 How does a SatNav work? Does it:
- a) Use the position of the stars?
  - b) Use a piece of string?
  - c) Use magic?

When is your birthday? Do you know how we work out the date? Now our calendar is based upon the Sun. Muslims use the Moon to work out the number of days in a year because they need to know when to pray and when to have their festivals.

How many did you get out of three?



**Ibn al-Haytham**



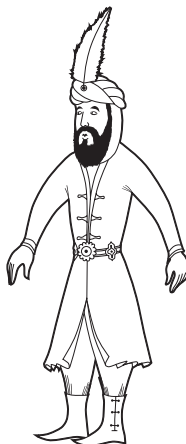
**Fatima al-Fihri**



**Al-Zahrawi**



**Sinan**



**Abbas ibn Firnas**



**Merriam al-Ijliya**



**Ibn Battuta**

It has been wonderful taking you round the exhibition. Take this leaflet home as a souvenir - you may want to colour it in later. It was lovely to meet you.  
**And if you want to see me again, just visit [www.1001inventions.com](http://www.1001inventions.com).**