

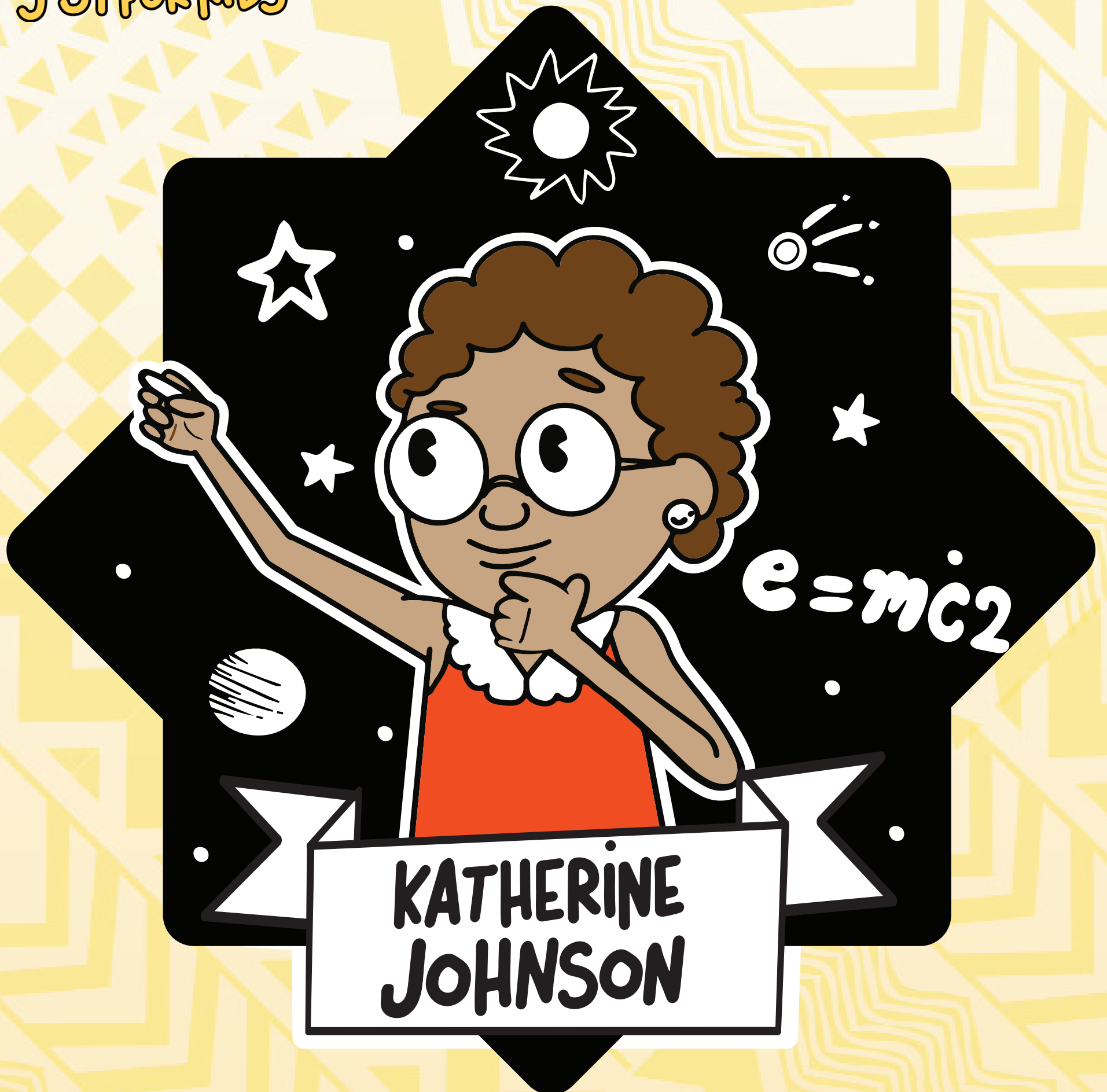
BECAUSE
OF THEM
WE CAN

BOX

JUST FOR KIDS

BECAUSE OF KATHERINE JOHNSON

AGES 9-12



KATHERINE
JOHNSON

THE NUMBERS TELL THE STORY

Instructions: You have probably heard of Johnson if you have ever watched the Movie "Hidden Figures". Her character was played by the actress Taraji P Henson.

Katherine Johnson always loved math and loved to count. Later on she was called 'a human computer' because she was so good at it and because she loved numbers so much. Below, you learn her story through numbers and understand how important of a role she played in sending people to the moon!



NUMBERS	THE STORY
15	Katherine Johnson started college when she was just 15 years old. That's right - 15! Most people who are 15 years old are in 10th grade, which is their second year of high school. While she was in college she studied to be a mathematician .
18	Johnson was 18 years old when she graduated from college. This is usually the age that people start college. She finished college in just three years, instead of the usual four.
34	This was how old Katherine Johnson was when she learned that NASA was hiring Black women. The first time she applied she was not hired because they already picked someone else - but the second time she tried, she got the job!
1961	Johnson calculated the path for a spacecraft called the Freedom 7. That was the spacecraft that put the first U.S. astronaut into space - his name was Alan B. Shepard.
26	During her career, Katherine Johnson wrote or helped to write 26 reports about math and about space. In 1969 Katherine Johnson helped make history again when she helped to conquer another space mission that landed the Apollo 11 ship safely on the moon.
0	Although Katherine Johnson had amazing talents - even among the people at NASA - she had to face some problems just because of her skin color. Zero is the number of Black people who were allowed to use the bathroom on the hall where she worked.
1986	Johnson retired this year after 33 years of service.
2016	A building at NASA was named after Katherine Johnson.
101	Katherine Johnson died at the age of 101 in 2020 but her legacy will live on forever!

READ & RESPOND

Now that you know more about Katherine Johnson's life, make a timeline using some important events from her life.

A TIMELINE FOR:



*Because
Of Them
We Can*

ROCK-THE-WORDS

Instructions: A rocket works a lot like a balloon. Blow up a balloon and then, instead of trying it, let it go at the end. What happens? How might this be similar to a rocket? Write down your observations.

There are many steps needed for a rocket to be built and even more steps to get it to launch. Below are some important words to do with rockets. Unscramble the words to see what they are! Then answer the questions using your own ideas about the steps from making a rocket to getting it into space!



SLESIMI _____

BSALT _____

SCAEP _____

GENINE _____

PEESRSRU _____

OCEFR _____

EONTWN _____

TIMOON _____

FTLI _____

GLOSSARY

Mathematician - a person who is an expert in mathematics.

Graduated - to earn a degree or diploma from a school, college, or university.

Hiring - to give work or a job to (someone) in exchange for wages or a salary.

Calculated - to find (a number, answer, etc.) by using mathematical processes.

Astronaut - a person who travels in a spacecraft into outer space.

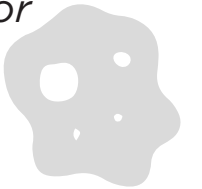
Conquer - to gain control of (a problem or difficulty) through great effort

Retired - not working anymore : having ended your working or professional career.

NASA - National Aeronautics and Space Administration, a U.S. government organization that is responsible for space travel and research.

IT'S YOUR TURN!

Now that you know a little bit more about words that have to do with rockets, you will answer a few questions that help you to think about what you need and the steps for launching a rocket.



1) How do you think rockets are built?

2) What has to happen for a rocket to actually be launched into the sky? Write out the steps.

Step 1:

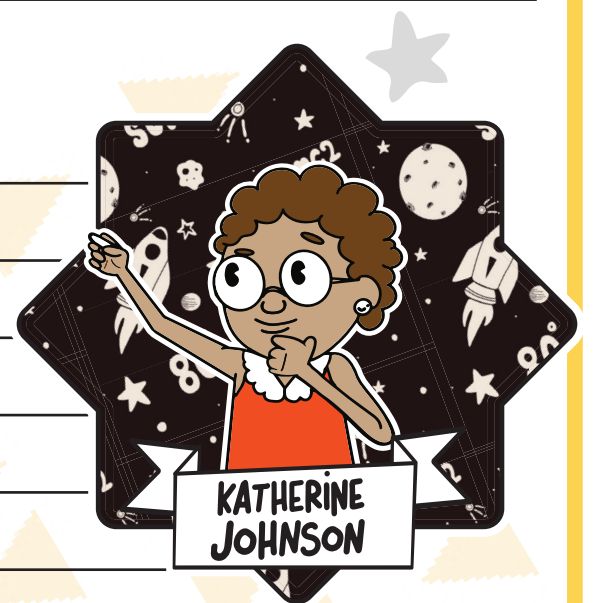


Step 2:

Step 3:

Step 4:

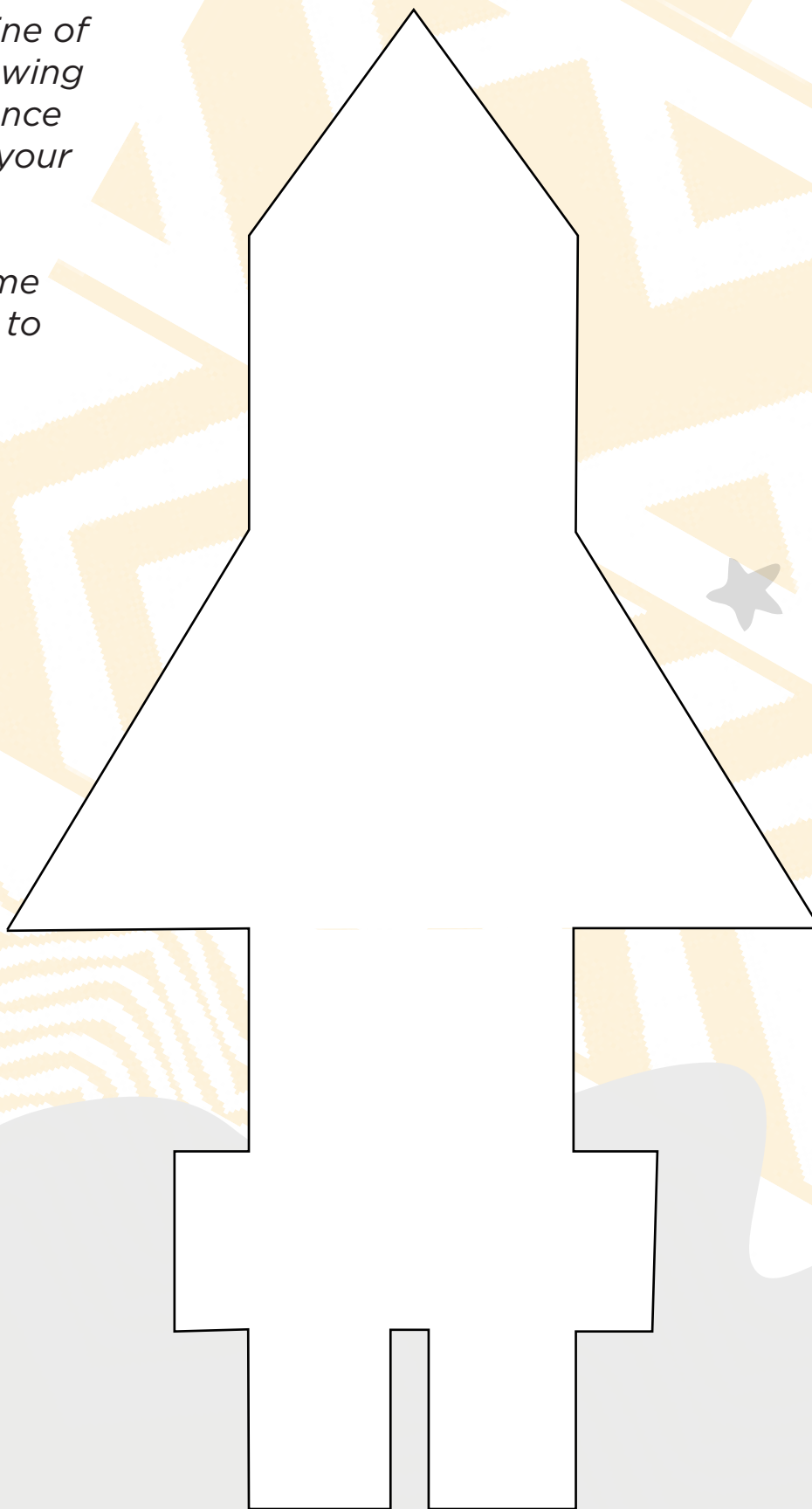
3) Why does a rocket stay in the air?



ROCK-THE-SHAPES

Use the space in the rocket to draw a line of symmetry. Then fill in the rocket by drawing as many different spaces as you can. Once you are finished, be sure to label all of your shapes.

You may look at the rocket and see some shapes that are already there. Use that to help you decide which shapes to draw!



ANSWER KEY, SCRAMBLE:
SLESMI- MISSILE (another word for rocket)
BSALT- BLAST (another way to describe what happens when a rocket takes off)
SCAEP- SPACE, (Where does a rocket go?)
OPLQAL- APOLLO (Name of a famous rocket)
GENINE- ENGINE (What a rocket needs to run)
PEESSRSRU- PRESSURE (A rocket has to have this to launch into space)
OCEFFR- FORCE (May the _____ be with you)
EONTWN- NEWTON (scientist whose law is used to make rockets)
TIMOON- MOTION (The law of _____ is used for rockets to launch)
FTLI- LIFT (A rocket has do _____ off the ground to be launched into space)

TAKE THE PLEDGE

I WILL HONOR
THE SACRIFICES OF
MY ANCESTORS.

I WILL BELIEVE
IN ME.

I WILL PURSUE
MY DREAMS.

I WILL HELP
OTHERS ALONG
THE WAY.