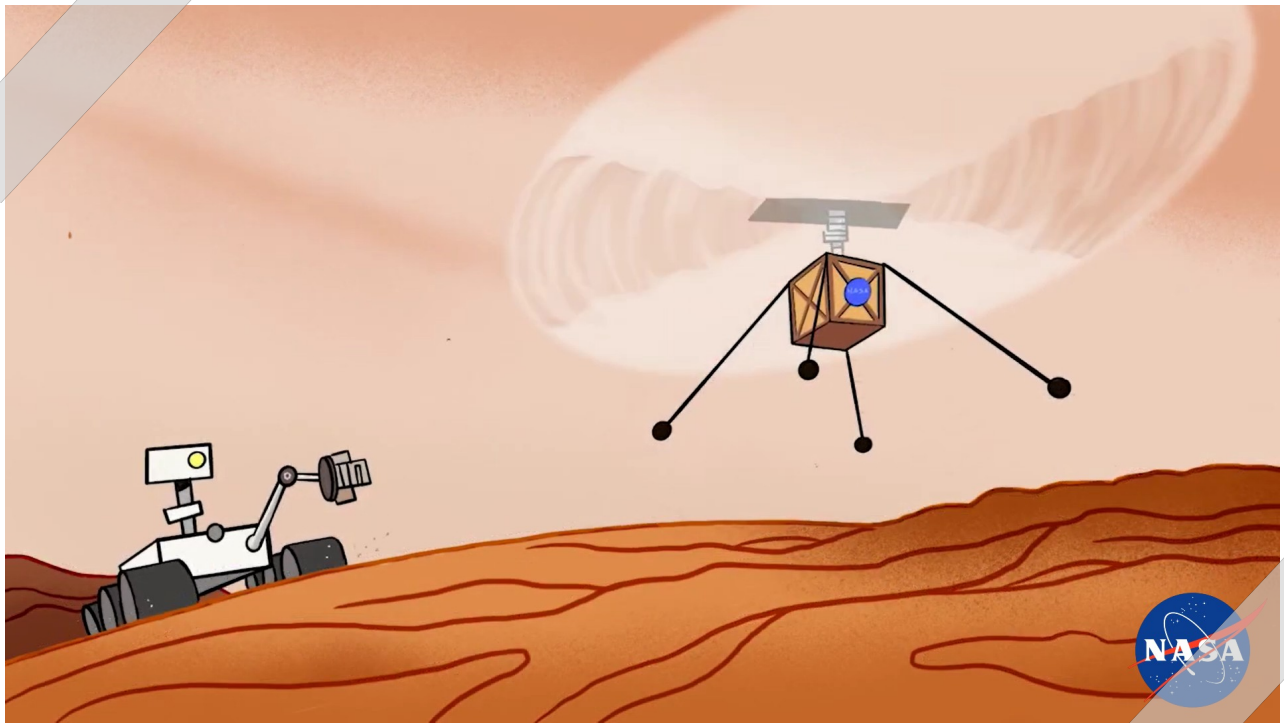
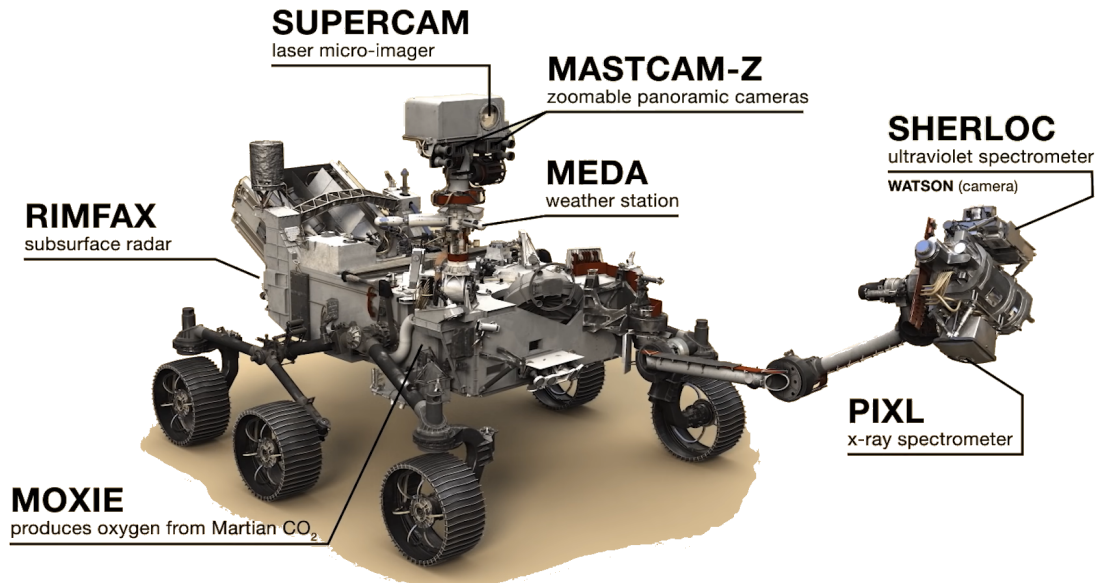


PERCY'S PURSUITS



BY ANASTASIA VAIL, ASTRONOMY EDUCATOR
AND NASA/JPL SOLAR SYSTEM AMBASSADOR

Percy has lots of parts that will help him explore Mars. Let's take a look at some of them!



SUPERCAM: This instrument studies chemicals and minerals using a camera, laser, and spectrometer (a light-measuring device).

MASTCAM-Z: These are cameras that can zoom in and focus on far-away objects, taking 3D pictures and videos.

MEDA: This is Percy's weather station! It can measure wind speed/direction, temperature, humidity, and dust (size/shape).

RIMFAX: This special radar can detect things under the ground.

MOXIE: This little box works like a tree — it breathes in carbon dioxide and breathes out oxygen. It's an experiment to see how easily we can make oxygen on Mars.

PIXL: This is a special device that can measure chemicals on a tiny scale.

SHERLOC/WATSON: This team of instruments uses cameras, lasers, and spectrometers to detect minerals and even possible signs of life!

Draw Percy in the space below. Then, label all of his important scientific instruments (use the page before this for help)!



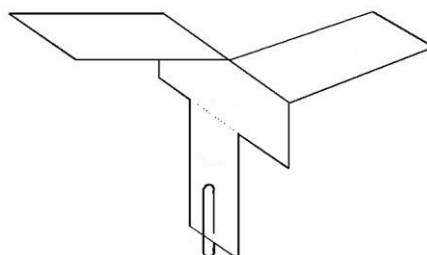
Hitching a ride with Percy is Ingenuity, the Mars helicopter! Mars' atmosphere is only 1% as dense as Earth's, so Ingenuity is a test of powered flight under those conditions.

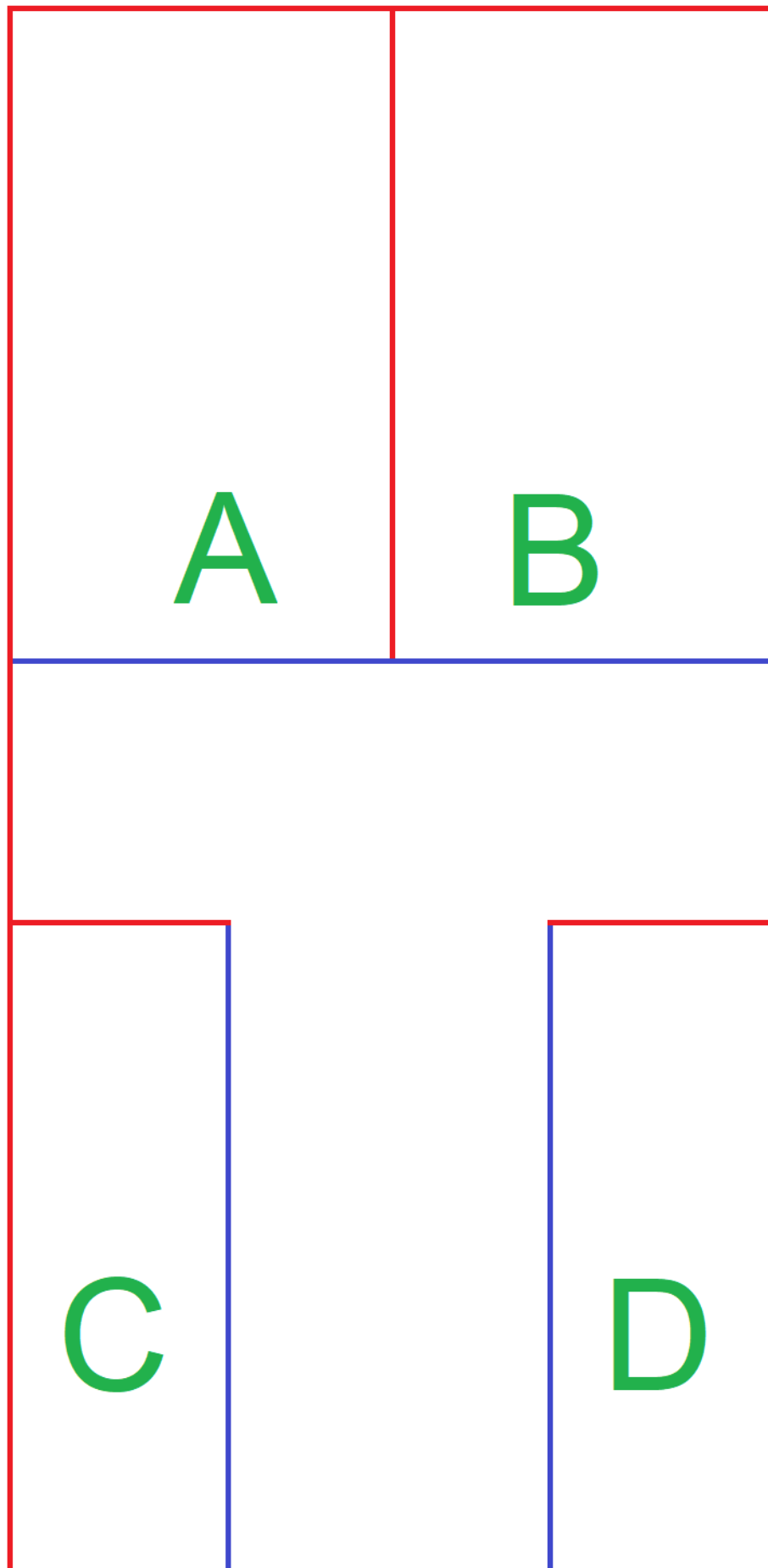


Let's make a helicopter that will fly on Earth!

Note: the **blue lines are for folding**, the **red lines are for cutting**

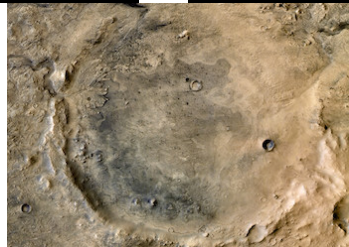
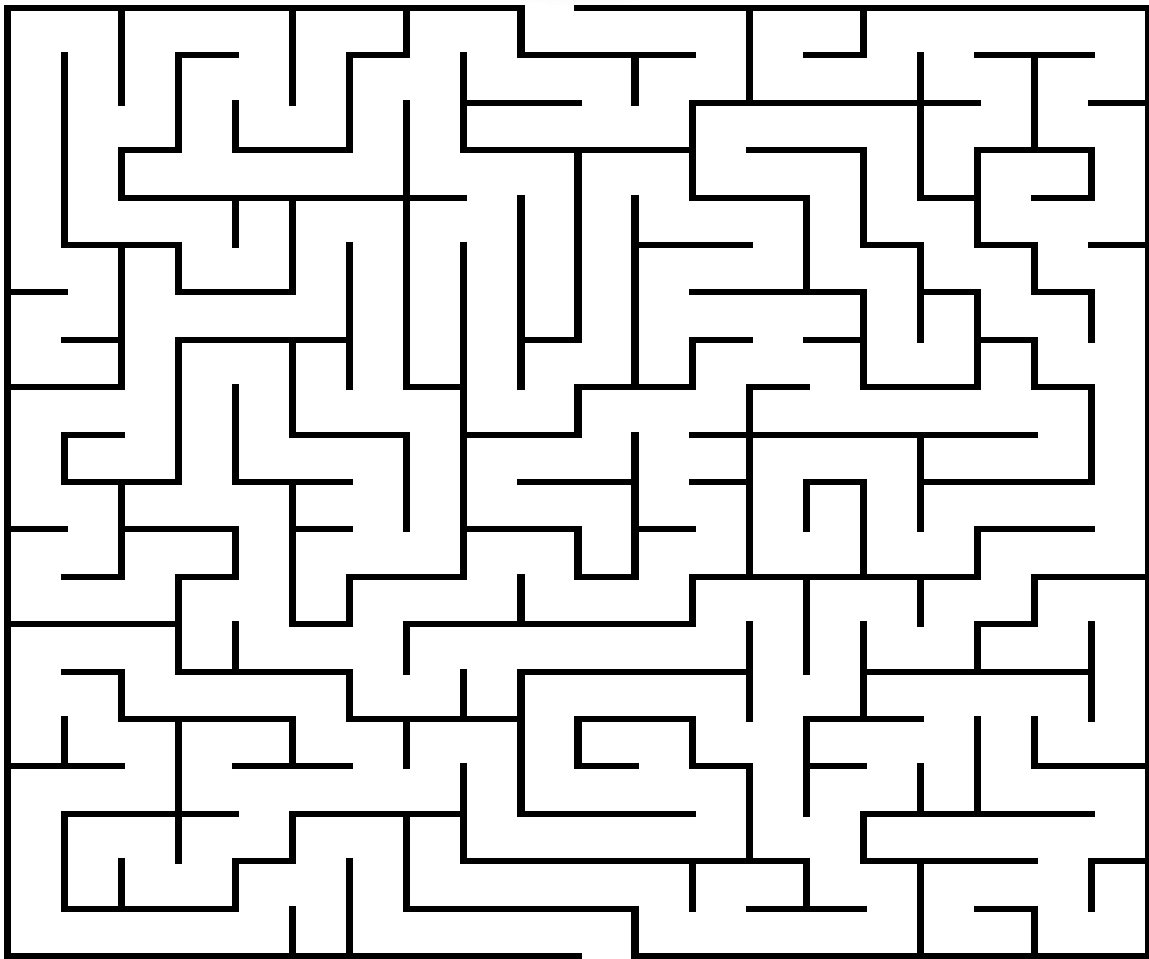
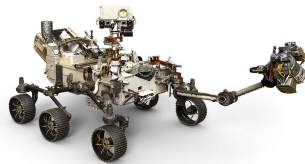
1. Cut out the big, **red rectangle** on the next page.
2. Carefully cut along the other **red lines**
3. Fold flap **A** down toward you (on the **blue line**) and fold flap **B** down away from you (on the **blue line**)
4. Fold flap **C** on the **blue line** (toward the middle)
5. Fold flap **D** on the **blue line** (toward the middle, on top of **C**)
6. Tape the bottom handle you just made (or use a paperclip to fasten it)
7. Decorate your helicopter with markers or colored pencils!
8. Drop the helicopter from up high and watch it spin!





Percy's landing site is a very special place on Mars called Jezero Crater.

Scientists think this crater was once flowing with lots of water. This makes it a great site to look for signs of past life! Percy will drill down into the Martian surface and collect samples for scientists on Earth to analyze! Help Percy travel to the crater to begin his search:



Let's search alongside Percy! Find all of the words below.

Q P D A H E L I C O P T E R K
B I U L O M I N E R A L S I X
I X S S L A N D I N G M F N W
E L T C P P P I M M F E M S A
R K Q B O E C K A N G D W T T
S M B C W R C V E Q Z A E R S
U A P H N S I T N N T Y A U O
P S A E D E N H R M T P T M N
E T S M Z V G R J O H M H E M
R C H I H E E B I E M F E N O
C A E C Z R N M H M Z E R T X
A M R A I A U A D D F E T S I
M U L L T N I R U H G A R E E
B L O S Q C T S A M N M X O R
R R C G X E Y J P O Y N K F D

Perseverance

spectrometer

instruments

helicopter

chemicals

SUPERCAM

SHERLOC

minerals

Jezero

MASTCAM

WATSON

landing

RIMFAX

PIXL

Ingenuity

weather

MOXIE

Mars

MEDA

dust

Percy's mission length is set for one Martian year, or 687 Earth days. He will help us in our goal to send humans to Mars...and eventually, maybe even have people living there! Thousands of people, including scientists at NASA and around the world, have been working for many years on getting Percy safely to Mars so he can begin his important research. Percy is truly a historic mission for humanity. You'll remember this forever!

You can learn more about NASA's Mars missions at:

<https://mars.nasa.gov/>

Follow me on Facebook for news of upcoming events and more children's activities:

www.fb.com/SSAVail

Clear skies!