



Zayn and Zoey had a fun weekend making super-fast rocket balloons, and learning all about space rockets with Dad. Dad explained to them about the different parts of a rocket and their functions. They even found out about an important law of science that actually helps rockets lift off the ground!

## Let's Chat!

After reading the book, let's discuss the story together and see how much of the book you remember!

- What is the third law of motion? Who discovered it?
- What do rockets need to lift off the ground?
- What is a thrust? What is used to create a thrust in the rocket?
- Can you name some spacecraft propellants?
- Which part of the rocket carries the equipment for the main purpose of the rocket?
- What do payload systems carry?
- What is a nose cone?
- Which system ensures that the rocket follows the correct path?
- Which system stores the propellant?
- What materials are rockets made of?

## HANDS ON FUN!

Here are some fun activities related to rockets to do with children.

### Handprint Rocket

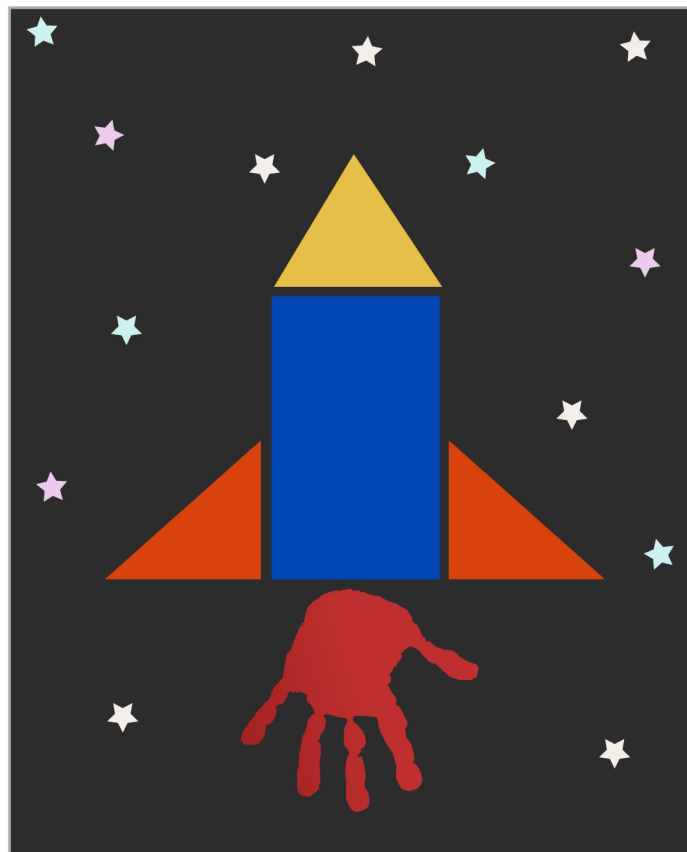
Set off to a flying start with this rocket craft!

#### Things you need:

- Star stickers
- Red paint
- Paintbrush
- Scissors
- Glue
- Dark blue or black craft sheet

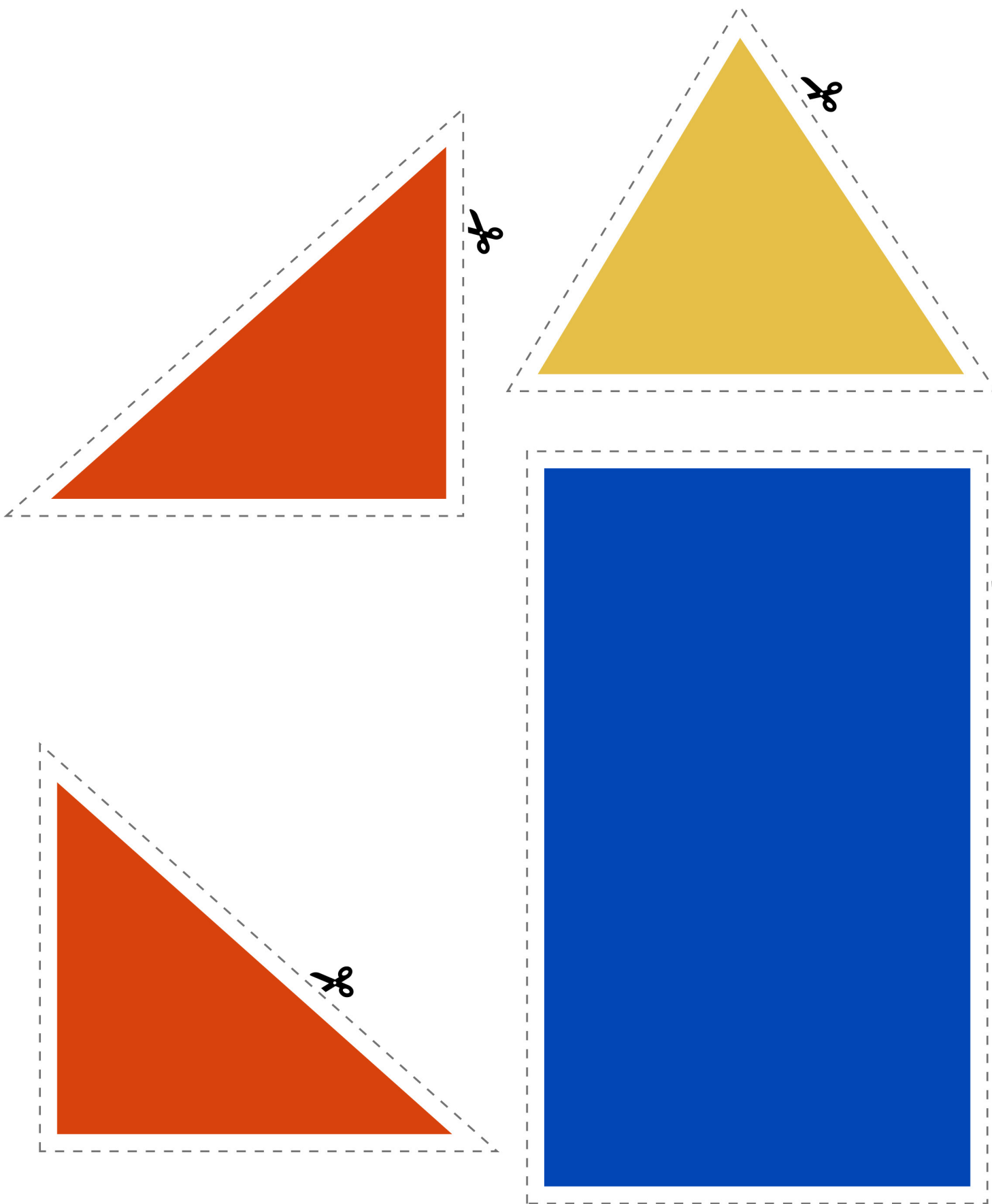
#### Steps to follow:

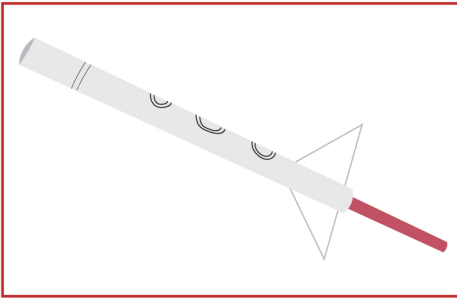
1. Cut the shapes out of the printable. Arrange and stick them on the base sheet.
2. Paint your palm red and imprint it upside down to create the flames.
3. Stick the star stickers around.
4. Your rocket craft is ready to blast off!



# Layn & Zoey

LEARN ABOUT ROCKETS





## Straw Rockets

Let's make breath-powered rockets and understand how real ones thrust through the atmosphere!

\*Kids may need an adult's help with measuring and taping.

### Things you need:

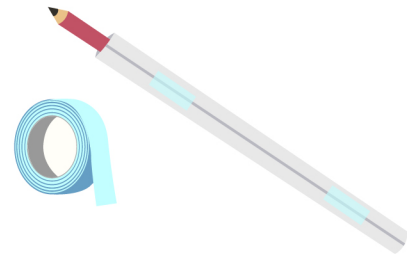
- Plastic drinking straws
- Printer paper
- Pencil
- Sticky tape
- Scissors
- Felt pens

### Steps to follow:

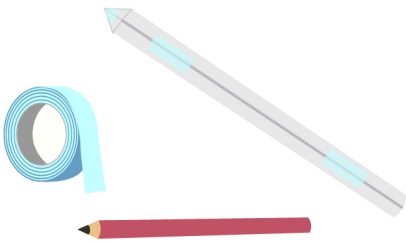


1. Cut a 3 inches wide and 9 inches long strip of paper.

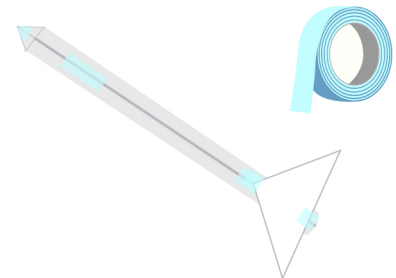
2. Coil it tightly around a pencil and secure it together with some sticky tape.



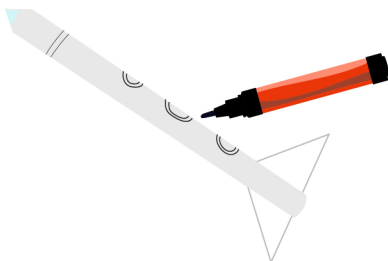
3. Gently, remove the pencil from the coiled strip, fold one end over and tape it down. This is the rocket's nose cone.



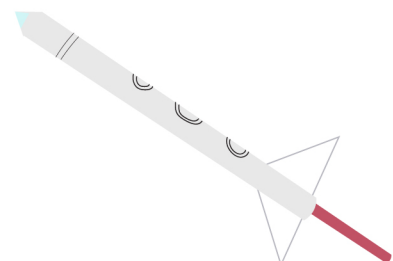
4. Cut triangles from paper to make wings and tape them on the bottom of the rocket as shown here.



5. Decorate your rocket with felt pens.



6. Hook your rocket loosely over a straw and blow through the straw to launch it!



## Rocket Crossword

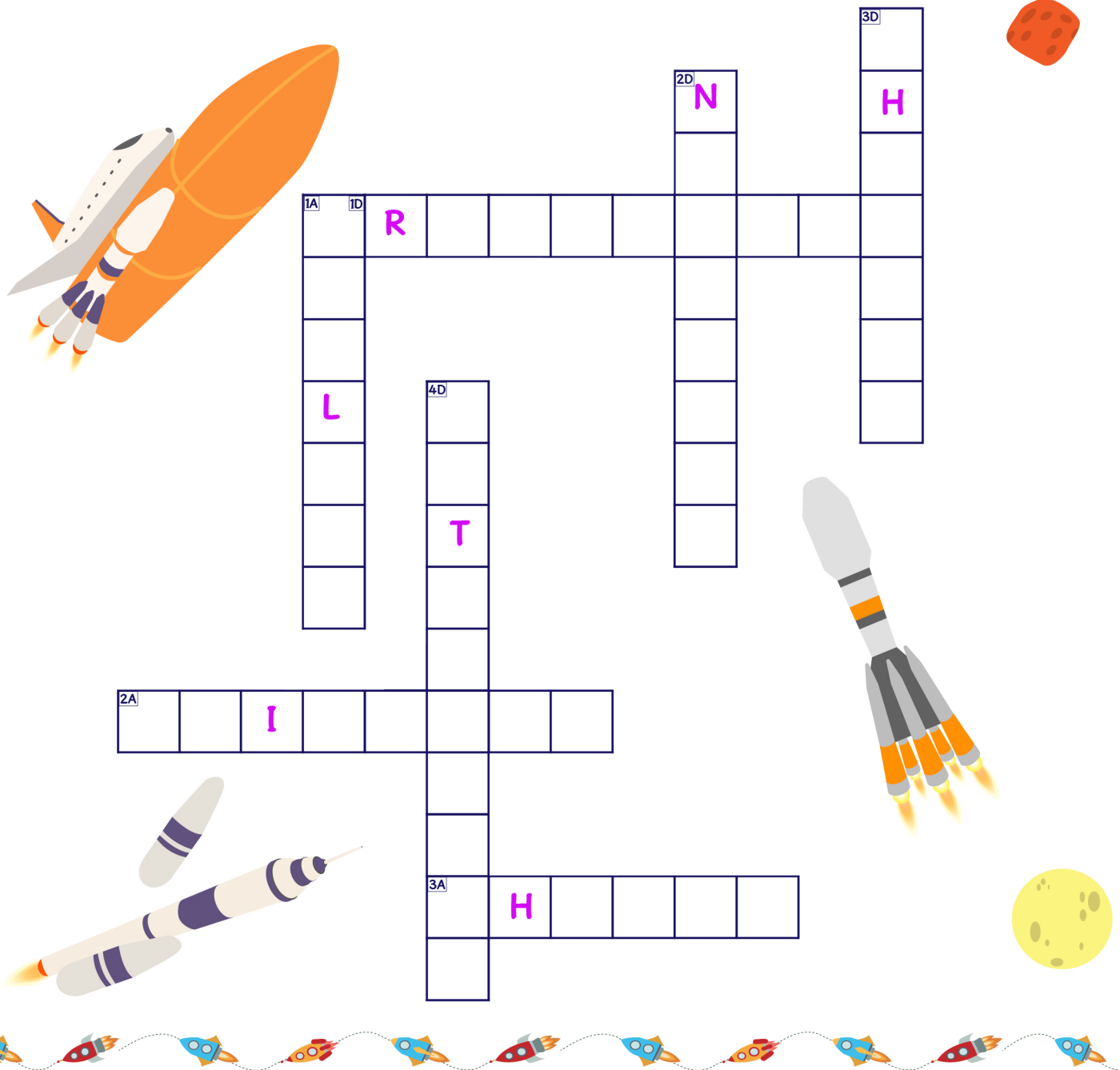
Jet set crossword time! Read the clues and fill in the words in this rocket crossword puzzle.

### Across:

1. This system executes the launch of the rocket at enormous speed.
2. The rocket follows the correct path due to this system.
3. The force that pushes the rocket upwards.

### Down:

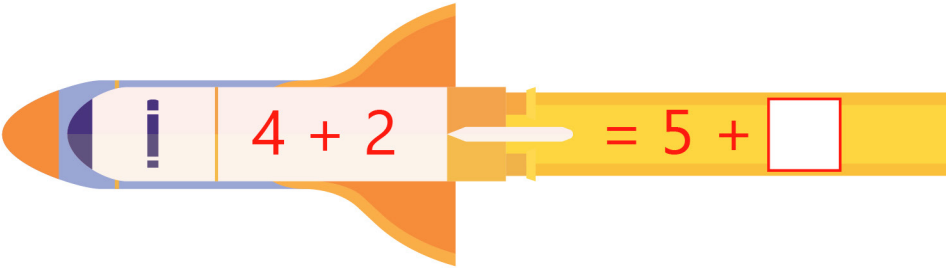
1. This system carries the equipment.
2. This helps the rocket move smoothly through the air.
3. They invented the rocket.
4. They are in the rocket when it goes into space.



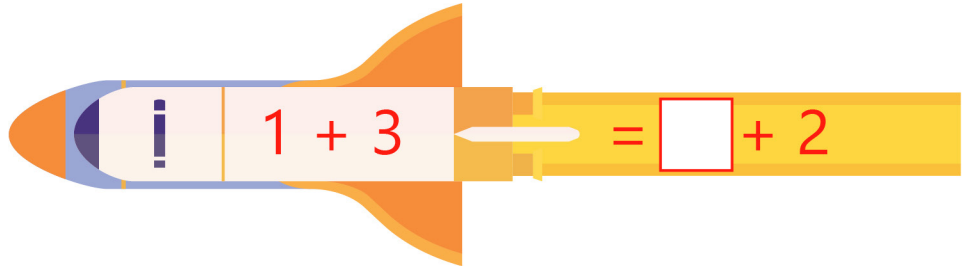
## Rocket Math

Let's solve some math equations with rockets!

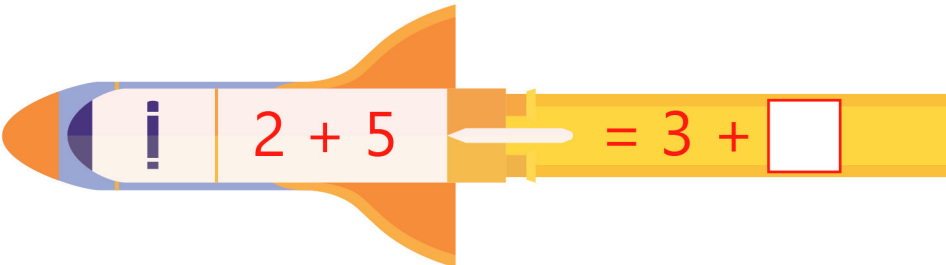
Make both the sides of the equation equal by writing the correct number in the box.



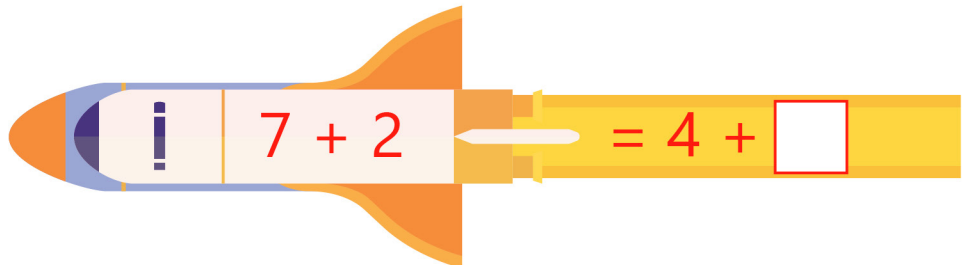
!  $4 + 2 = 5 + \square$



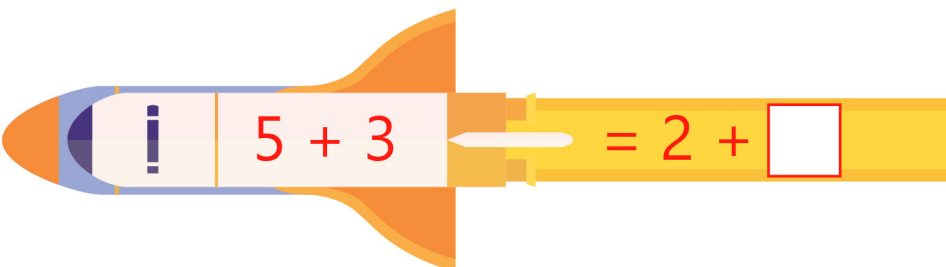
!  $1 + 3 = \square + 2$



!  $2 + 5 = 3 + \square$



!  $7 + 2 = 4 + \square$



!  $5 + 3 = 2 + \square$