K Module 5

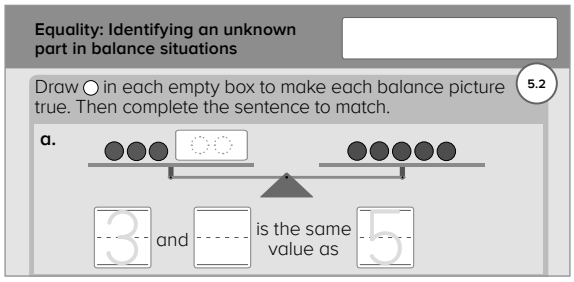
ORIGO STEPPING STONES 2.0

Core Focus

- Addition: Exploring the concept of equality
- Position: Using spatial language (below, above, beside, next to, left, and right)

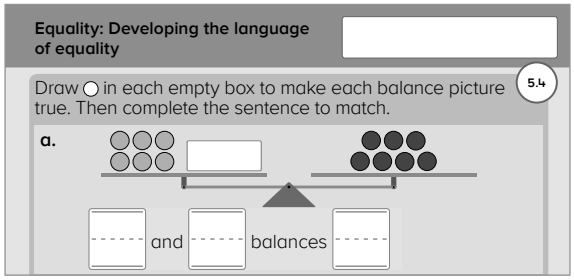
Equality and Addition

- Now that students have started to explore addition, it is time to investigate the concept of equality. Balancing real items using a pan balance, or drawing pictures of items that balance, give students more opportunities to think about addition. This work extends the concepts students learned when using pan balances to compare the masses of objects.



In this lesson, students make groups of equal quantity and investigate the idea of balance.

- Students use pan balances to show that two quantities are equal, or balanced. For example, 3 and 2 together balance 5.



In this lesson, students read the expressions for equality: *balances*, *is the same value as*" and *is equal to*.

- Students learn that the equal symbol (=) means *is the same value as,* or *balances,* or *is equal to*. Developing this important concept now helps students avoid later misconceptions about the equal symbol (i.e. many students think the equal symbol is an instruction to write the answer, instead of indicating relative equality).

Ideas for Home

- Pretend to be a pan balance with one shoe of the same pair in each hand. Tell your child, "These are equal. They balance." Repeat with two different objects that vary in mass. While tilting up the arm with the lighter object and down the arm with the heavier item, say, "These are not equal. They do not balance." Try the same activity using different objects.
- Knowing the different combinations of numbers to reach a given total is an important skill for addition. Give your child a set of small objects, like pennies or marbles, and ask them to find all the different ways to break the set into two parts: 7 pennies can be broken into sets of 1 and 6, 2 and 5, and 3 and 4. Repeat with sets from 4 to 10.

Glossary

- Students are introduced to the **equal symbol** (=) very early on to help avoid later misconceptions about the meaning of the symbol itself.

Helpful videos

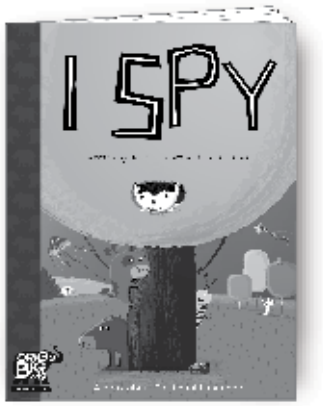
View these short one-minute videos to see these ideas in action.

www.bit.ly/O1_21
www.bit.ly/O1_31

K Module 5

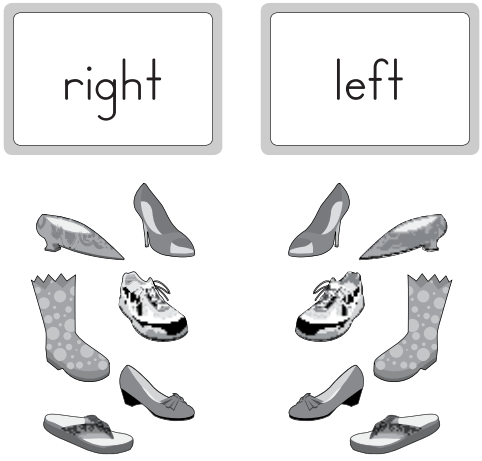
Position Words

- **Spatial vocabulary** such as *above*, *below*, *next to*, *on top of*, and *beside* helps students describe and understand the location of objects in their world.
- In class, students arrange pictures to match descriptors such as *below*, *next to*, and *on the top shelf*.



Using the online *Big Book Tool*, students position the dog to match spatial words, such as under, above, next to, and on top of.

- Students learn to identify their right and left hands and feet.
- Students discuss which hand they use for most activities, such as throwing a ball, writing their name, or drawing a picture.



Students sort shoes to learn about left and right.

Ideas for Home

- When helping your child clean up their room, use spatial vocabulary, such as, “Put the toys on top of the shelf,” or “Hand me the clothes from under the bed.”
- Have your child position their favorite plush toy (e.g. a teddy bear) according to your directions: “Put the bear on top of the bed,” or “Put the bear in between the window and the door.” Also have your child practice giving you directions.
- Play games like Simon Says using left and right: “Simon says, hop on your left foot,” or “Simon says, wave your right hand.”

Glossary

- An understanding of **spatial vocabulary** (*left*, *right*, *up*, *down*) increases a child's ability to recognize shapes in different orientations, and improves their spatial skills.