

Is it Fair?

Story problems about snacks

Math ideas - Represent and solve problems, compare, equivalence.

Fair or Not Fair

“Is It Fair?” is a routine that supports quantifying sets and comparing and equalizing them.

From Antonia Cameron’s work, here are four image types:

Image type #1 - Everything in the two images is the same (same snack type, same quantity of snack, same arrangement of snack)

Image type #2 - Same snack type, different arrangement of snack.

Image type #3 - Same snack type and quantity, various sizes and shapes of snack are shown.

Image type #4 - Same type of snack, but different quantity.

Also included are written problems using the “Is It Fair” context that allow teachers to see students’ recordings as they compare sets and find ways to make the situations fair.

Is it Fair?

Image Type 1

Everything in the two images is the same.

A



B



The math: Subitizing, one-to-one, cardinality, equivalence, same/different.

Questions you might ask:

"Are the snacks for Ali and Taylor fair or not fair?"

"What do you see that makes them fair?"

Is it Fair?

Image Type 2

Same snack and quantity, different visual arrangement.



Math Ideas - Subitizing, one-to-one, cardinality, same/different, more/less/equal, part/whole.

Questions you might ask:

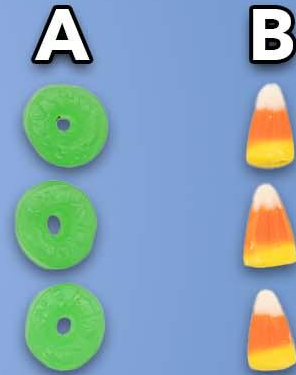
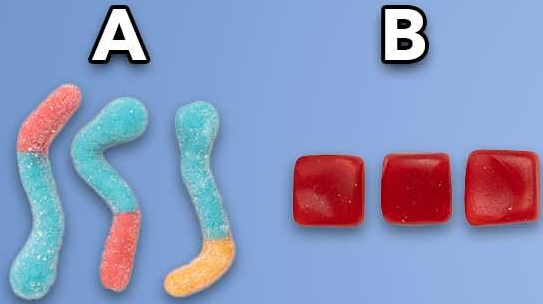
"How is Ali's snack the same as Taylor's? How is it different?"

"Are the snacks fair? What do you see that makes them fair?"

Fair or Not Fair?

Image Type 3

Same snack type and quantity, various sizes and shapes of snack



Math Ideas: subitizing, quantity, same/different, more/less/equal, horizontal/vertical, attributes.

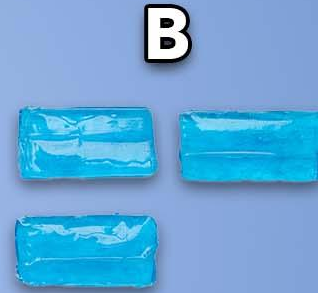
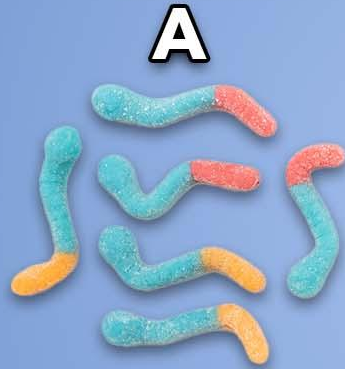
A question you might ask:

"Are the snacks fair? Why or why not?"

Is it Fair?

Image Type 3 (extension)

Same snack type, different quantities, various sizes and shapes of snack.



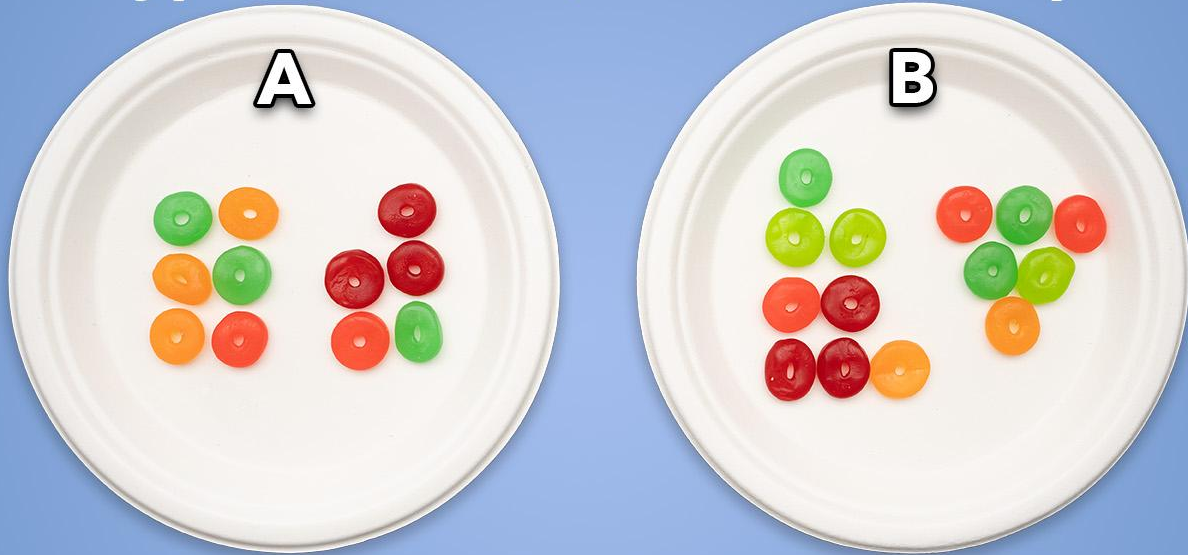
Math Ideas: subitizing, quantity, same/different, more/less/equal, fractions, parts/whole, skip counting

Questions you might ask:

- "Are the snacks fair? Why or why not?"
- "How might you make them fair?"

Is it Fair?

Same type of snacks, but different quantity.



Math ideas - subitizing, hierarchical inclusion, addition, comparing, equivalence

Questions you might ask:

"Are these snacks fair? Why or why not?"

"How might you make them fair?"