SECOND GRADE ACTIVITY 1
THE POWER OF SPHERES

IKOS in the classroom promote offscreen learning and hands on fun for all grade levels!

MATH

LEARNING OBJECTIVES:

Standard 2.G.3 Partition circles in to two, three, or four equals shares: describe the shares using the words halves, thirds, half of, or a third of, etc; and describe the whole as two halves, three thirds, or four fourths.

SUPPLIES:

Resources to be gathered before students arrive:
- IKOS spheres (number depending on how many participants.

OVERVIEW:

Students will collect 20 IKOS pieces of differing colors to make a pattern. They can choose an AB, ABC, etc.

TEACHER NOTES:

SECOND GRADE ACTIVITY 2
THE POWER OF SPHERES

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MATH

LEARNING OBJECTIVES:

Standard 2.MD.3 Estimate lengths using units of inches, feet, centimeters, and meters.

SUPPLIES:

Resources to be gathered before students arrive:
- IKOS spheres (number depending on how many participants.

OVERVIEW:

1. Students will stack the IKOS pieces as high as they can go until the tower falls over.
2. They will then measure how high they were able to build the tower in inches, feet, centimeters and meters.
3. Students will record their results.

TEACHER NOTES:

SECOND GRADE ACTIVITY 3
THE POWER OF SPHERES

IKOS in the classroom promote offscreen learning and hands on fun for all grade levels!
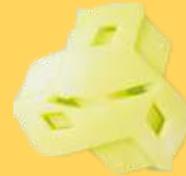
MATH

LEARNING OBJECTIVES:

Standard 2.G.3 Partition circles in to two, three, or four equals shares: describe the shares using the words halves, thirds, half of, or a third of, etc; and describe the whole as two halves, three thirds, or four fourths.

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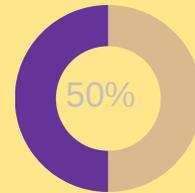
SUPPLIES:

Resources to be gathered before students arrive:
- IKOS spheres (number depending on how many participants.

OVERVIEW:

1. Students will create an IKOS sphere (all in the same color).
2. They will look at the sphere and estimate how many cotton balls can fit inside a whole sphere.
3. Students will create ½ a sphere and estimate how many cotton balls can fit in ½ a sphere.
4. Then they will put the cotton balls in ½ a sphere and count how many it can fit. They will compare it to their estimate.
5. They will then fill the sphere up with cotton balls and compare their estimate with the actual amount they used.
6. Students will compare how the amount that filled ½ a sphere and a whole sphere.. was it twice as much? Why or why not?

TEACHER NOTES:

SECOND GRADE ACTIVITY 4
THE POWER OF SPHERES

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SCIENCE

LEARNING OBJECTIVES:

Standard 3 Objective 1 Communicate observations about falling objects.

SUPPLIES:

Resources to be gathered before students arrive:
- IKOS spheres (number depending on how many participants.

OVERVIEW:

1. Students will create an IKOS sphere.
2. They will drop their IKOS sphere from different heights until the IKOS sphere breaks apart completely (starting at 1 foot).
3. Document each drop and what happened.

EXPLORE:

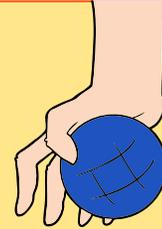Ask: At what height does the IKOS sphere break?

SECOND GRADE ACTIVITY 5
THE POWER OF SPHERES

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SCIENCE

LEARNING OBJECTIVES:

Standard 3 Objective 1 Communicate observations about falling objects.

SUPPLIES:

Resources to be gathered before students arrive:
- IKOS spheres (number depending on how many participants.
- Objects to fill the IKOS sphere

OVERVIEW:

1. Students will create 2 IKOS sphere.
2. Fill the IKOS spheres with different items (cotton balls, paper clips, cubes… etc.)
3.   Drop each ball from the same height at the same time and observe what happens.
4. Fill the spheres with different objects and drop them again. (repeat 4-5 times)
3. Document each drop and what happened.

EXPLORE:

Ask: What happens when spheres are dropped at the same time with different objects inside?