Going up and down on a Seesaw is fun! With Balance Beans, you’ll have even more fun trying to keep your Beans balanced! Carefully place the colorful Beans on the Seesaw to keep it from teetering. When you balance the Seesaw, you are actually balancing an equation. Even if your Beans are going down, your logic skills will keep going up!

**GAME INCLUDES:**

- Seesaw Balance Tray & Base
- 40 Challenge Cards
- Stationary Beans (All Red)
  - 1 Single Bean
  - 1 Double Bean
  - 1 Triple Bean
- Moveable Beans
  - 2 Single Beans
  - 2 Double Beans
  - 2 Triple Beans

**OBJECT:**
Balance the Seesaw by adding the Beans shown on the Challenge Card to the Balance Tray.

**SETUP:**
1. Assemble the Balance Tray onto the Base as shown in the diagram:

**STEPS TO PLAY:**
1. Place the indicated Beans onto the Balance Tray until it balances.
   - You may not move the Red Beans during a challenge.
   - You must place all of the indicated Beans onto the tray.
   - You may place the Beans on either side of the Seesaw or on the middle row.
   - You may place the Double Beans and Triple Beans either across the width of the Balance Tray or along the length of it.
2. Select a Challenge Card.
3. Set the indicated Red Beans onto the Balance Tray as shown on the Challenge Card.
4. Gather the Beans shown in the “Add to Balance” section of the Challenge Card. Set aside the rest of the Beans.

**NOTE TO PARENTS:**
Balance Beans is so much fun that your child will welcome a little math with their playtime! Of course, it isn’t necessary to use algebra to solve these challenges, but playing Balance Beans is a great puzzle that is fun to play–simply move the Beans around using trial and error until you balance the Seesaw.

Balance Beans challenges are designed to help develop mathematical thinking skills. The Red Beans are a visual representation of the mathematical concepts: the value of a number and its position on the number line. Learning to use this visual representation is a key step in developing mathematical thinking, which is essential for understanding algebra and other advanced math concepts.

But wait… there’s more! Underlying the play here is elementary algebra, to be specific. Without looking at the back of the Challenge Card, you will know you have won when the solution. Solutions are on the back of each card. Note that a challenge may have more than one solution. This allows you to work together with your child to solve Balance Beans challenges using math!

Balance Beans challenges are designed to help develop mathematical thinking skills. The Red Beans are a visual representation of the mathematical concepts: the value of a number and its position on the number line. Learning to use this visual representation is a key step in developing mathematical thinking, which is essential for understanding algebra and other advanced math concepts.
OBJECT:
Balance the Seesaw by adding the Beans shown on the Challenge Card to the Balance Tray.

SETUP:
/one.lf. Assemble the Balance Tray onto the Base as shown in the diagram:
two.lf. Select a Challenge Card.
three.lf. Set the indicated Red Beans onto the Balance Tray as shown on the Challenge Card.
four.lf. Gather the Beans shown in the “Add to Balance” section of the Challenge Card. Set aside the rest of the Beans.

STEPS TO PLAY:
one.lf. Place the indicated Beans onto the Balance Tray until it balances.
• You may not move the Red Beans during a challenge.
• You must place all of the indicated Beans onto the tray.
• You may place the Beans on either side of the Seesaw or on the middle row.
• You may place the Double Beans and Triple Beans either across the width of the Balance Tray or along the length of it.
two.lf. When the Seesaw balances—YOU WIN!

CHALLENGE CARD:
SOLUTIONS:
Solutions are on the back of each card. Note that a challenge may have more than one solution. Without looking at the back of the card, you will know you have won when the Seesaw is balanced!

NOTE TO PARENTS:
Balance Beans is a great puzzle that is fun to play—simply move the Beans around using trial and error until you balance the Seesaw.

But wait... there’s more! Underlying the play here is a fundamental principle of physics: the further out a weight is from the center of balance, the more downward force it exerts onto the Seesaw.

We have calibrated our balance so that a Single Bean that rests on the second row from the center of the Balance Tray will balance exactly with two Beans on the first row of the opposite side; and one Bean on the third row from the center of the Balance Tray will balance exactly with three Beans on the first row of the opposite side.

This allows you to work together with your child to solve Balance Beans challenges using math! Elementary Algebra, to be specific.

Here is an example showing how to use math to solve a Balance Beans challenge.

In this case, placing one Bean on the first row on the left side and one Bean on the second row on the left side will balance the Seesaw and solve the challenge!

Of course, it isn’t necessary to use algebra to solve these challenges, but playing Balance Beans is so much fun that your child will welcome a little math with their playtime!

ABOUT THE INVENTORS:
Vesa Timonen and Timo Jokitalo are puzzle inventors from Helsinki, Finland. In addition to inventing fun games and puzzles, including ThinkFun’s teetering logic maze, Tilt, they have an expertise in software development and mathematics. These skills helped them to create a set of challenges that will surely get your brain cells firing!

Elementary Algebra, to be specific.

Here is an example showing how to use math to solve a Balance Beans challenge.

In this case, placing one Bean on the first row on the left side and one Bean on the second row on the left side will balance the Seesaw and solve the challenge!

Of course, it isn’t necessary to use algebra to solve these challenges, but playing Balance Beans is so much fun that your child will welcome a little math with their playtime!

ABOUT THE INVENTORS:
Vesa Timonen and Timo Jokitalo are puzzle inventors from Helsinki, Finland. In addition to inventing fun games and puzzles, including ThinkFun’s teetering logic maze, Tilt, they have an expertise in software development and mathematics. These skills helped them to create a set of challenges that will surely get your brain cells firing!

Elementary Algebra, to be specific.