

STEM

CHALLENGE



LEARN • BUILD • PLAY • EXPLORE

At Launch Family Entertainment, fun meets learning!

Work together with your friends, classmates, or teammates to complete exciting STEM challenges throughout the park.

1 GRAVITY DROP



Mission: Predict which object will hit the trampoline first.

What You'll Learn:

- Gravity
- Air resistance
- Scientific observation

Think About:

- Does weight matter?
- What happens when shape changes?

2 BUILD THE TALLEST TOWER



Using cups, straws, tape, or blocks, build the tallest free-standing tower.

Engineering Skills:

- Structural design
- Balance
- Teamwork
- Problem solving

Bonus Challenge:

Can your tower survive someone jumping nearby?

3 MARBLE MAZE ENGINEERS



Design a marble run using tubes, ramps, and connectors.

Explore:

- Gravity
- Momentum
- Angles
- Speed

Try changing the slope to see how fast the marble travels!

4 HUMAN CATAPULT



Estimate how high you can bounce before jumping.

Record:

- Prediction
- Actual result
- Difference

Learn about:

- Potential Energy
- Kinetic Energy
- Force

5 BRIDGE BUILDER



Can your bridge support the most weight?

Use:

- Popsicle sticks
- Paper
- Tape
- Straws

Test different bridge designs and discover why some are stronger than others.

6 REACTION TIME CHALLENGE



Use the arcade or sports attractions to test your reaction speed.

Questions:

- Which hand is faster?
- Does practice improve performance?
- Can your team improve
- its average score?

7 LAUNCH DESIGN LAB



Imagine you're designing the next Launch attraction!

Draw:

- Your attraction
- Safety features
- Engineering design
- How guests interact with it

Present your idea to your team.

STEM SKILLS YOU'LL PRACTICE



CRITICAL THINKING



ENGINEERING DESIGN



TEAMWORK



PROBLEM SOLVING



CREATIVITY



SCIENTIFIC OBSERVATION



COMMUNICATION

→ THINK LIKE AN ENGINEER!



Ask questions
What happened?



Make predictions
What do you think will happen next?



Test ideas
Try it!



Improve
What would you change?



KEEP EXPLORING!

Every visit to Launch Family Entertainment Parks is an opportunity to discover, experiment, and have fun through STEM!

LEARN. BUILD BOUNCE. LAUNCH!