



Exhibit Guide: 1st Floor

Use the questions and activity suggestions to guide your learning through play!



5 Senses

- Listen to the different sounds. How are some sounds louder than others? How do sounds move?
- Smell the different scents and guess what they are
- Use the goggles to explore the visuals on the wall – is Einstein following you as you move back and forth?
- Touch the items in each box and guess what is inside. Are some smooth? Can you describe the material you are feeling?
- Which sense do you think you use most in the day?
- Which sense do you think is the most important?

Oren Firetruck

- Experiment with the knobs and gears on the side of the truck to see how they move
- Learn more about fighting fires in Murfreesboro and what firefighters wear by reading the placard on the side of the firetruck
- How do firefighters help our community?
- What should you do if you ever see a fire?

WaterWorks

- How many balls would you estimate are needed before the basket empties?
- With the blocks: Race to see who could build the tallest tower
- How did the water flow change when you started building with the blocks?
- How did changing the placement of the yellow pieces affect the water flow?
- What are some reasons that someone might build a dam in a lake or river?
- At the Water Wall, send a ball up the tube. Make a prediction (or hypothesize) where you think the ball will fall. If you play with a friend, see who makes better predictions.
- Try to hit all of the different objects with the water guns. Notice how the force of the water causes each of the objects to move.

Check out the programs
on our website:

www.explorethcdc.org

The Great Outdoors

- Why do turtles have a hard shell? How does it help to protect them?
- When you pulled the handle of the oar back toward you, what happened to the paddle?
- When you pushed the handle of the oar away from you, what happened to the paddle?
- Were the lighting patterns of the different fireflies the same or different?
- Where do you think each of these animals live?
- Were you able to create the same knots from the instructions?

Farm to Table

- Pretend you are going to cook a meal and pick out the ingredient that you will need
- What do you notice about the vegetables? Do they grow above ground or underground?
- Which of these foods are your favorite? Which are your least favorite?
- If you have to cook a recipe all by yourself, what food would you choose to cook?
- How does the vegetable grow from seed to food?



Exhibit Guide: 2nd Floor



Use the questions and activity suggestions to guide your learning through play!

Nissan Car Garage

- Use the service cards to complete different services tasks
- Time yourself to see how quickly you can change the tires on the car
- Give different jobs to each person in your group to service the car together.
- If this car could run off of renewable energy, which energy would you use? How would you make it work?
- What is difference or the same about this car and the car that your family uses?

Sand Shaper

- Hold your hand over the land. How do you think rainfall will change the land over time?
- Try to create different land masses like a river, mountain, or lake.
- Build the tallest mountain you can! What color is the mountain peak? What color is the valley?

Rig-ama-jig and Simple Machines

- How did each lever and gear affect the element in the maze?
- How did the different gears and levers work together to move the bowling ball through the maze?
- What do you notice about how the pieces connect together?
- Build a new invention. What does it do? How will your invention help the world?

Train Depot

- Follow the path of each train to see where it goes
- What powers the train? How would you change the power to adjust the speed?
- How do the train cars connect? Does one side connect better than another? Why?
- How many train cars can you trail together before the bonds break?
- Board the back of the train and pretend like you are taking a train ride around town.

KEVA Engineering

- Use the KEVA sticks to create different 2D shapes and 3D objects
- Make a repeating and symmetrical pattern with the KEVA sticks
- Build a house of KEVA sticks on the Earthquake simulator. See how long it takes to fall down when you begin shaking the box.
- Build a model of your house
- Build a tall tower using only 100 blocks. Knock it down! What force brings it down?

School and Play!

Below is a list of TN Science Standards you are learning as you explore and play.

5 Senses: K.PS1, K.LS1, K.ETS1

WaterWorks: K.ESS3, 2.PS4, 2.ESS2, 3.ESS2

Oren Firetruck: K.ESS3, 2.PS2

The Great Outdoors: K.LS1, K.LS3, 2.LS1, 2.LS3, 2.PS2, 3.LS1, 3.LS4, 4.LS2, 5.LS3

Farm to Table: K.ESS3, 1.LS1, 1.LS2, 2.ESS1, 3.LS1, 4.LS2, 4.ESS3

Nissan Car Garage: 2.ETS1, 2.ETS2, 4.ETS1, 4.ESS3, 5.ETS1

KNEX and Simple Machines: 2.PS2, 2.PS3, 2.ETS1, 3.ETS1, 4.ETS2, 5.ETS1

Train Depot: 2.PS2, 2.PS3, 3.PS2, 3.PS3, 5.PS2

Sand Shaper: 2.ESS2, 4.ESS1

KEVA Engineering: K.PS1, 3.PS3, 4.PS3, 4.ETS2, 5.PS2, 5.ETS1

What other ways can you play to engage your curious mind?