Stations for MOAS Family Science Night-

and follow up Questions (optional)

1. **Newton's 1st Law of Motion**- Recreate a crash to show how objects transfer energy. An object at rest stays at _____ until a greater force is added.

SC.K.P.12.1, SC.K.P.13.1, SC.1.P.12.1, SC.2.P.13.1, SC.2.P.13.4, SC.4.P.10.1, SC.4.P.10.2, SC.4.P.12.1, SC.5.P.10.1, SC.5.P.13.2, SC.5.P.13.3,

2. **Newton's 2nd Law of Motion**- Find the angle that will get the ball to its destination. If a ball has too much force on it then it will roll _____ of the target?

SC.K.P.12.1, SC.K.P.13.1, SC.1.P.12.1, SC.2.P.13.1, SC.2.P.13.4, SC.4.P.10.1, SC.4.P.10.2, SC.4.P.12.1, SC.5.P.10.1, SC.5.P.13.2, SC.5.P.13.3,

3. **Newton's 3rd Law of Motion**- Explore the concept with Newton's Cradle. If four balls are dropped then _____ balls will bounce?

SC.K.E.5.1, SC.K.P.12.1, SC.K.P.13.1, SC.1.P.12.1, SC.2.P.13.1, SC.2.P.13.4, SC.4.P.10.1, SC.4.P.10.2, SC.4.P.12.1, SC.5.P.10.1, SC.5.P.13.2, SC.5.P.13.3,

4. **Lever**- Learn the concepts of a lever and how it is used. The fulcrum should be placed _____ the weight to make the work easier.

SC.1.P.12.1, SC.2.P.13.1, SC.3.P.10.1, SC.4.P.10.1, SC.4.P.10.2, SC.4.P.12.1, SC.5.P.10.1,

5. **X-ray Vision**- An explanation on how an X-ray works and students are tasked with matching skeletons to the proper animals. An X-ray reveals the _____ of an animal.

SC.K.P.8.1, SC.1.P.8.1, SC.3.P.10.1, SC.3.P.10.3, SC.3.P.10.4, SC.4.P.10.1,

6. **Potential Energy**- Demonstrate how stored energy can be used to move objects. A stretched rubber band has _____ energy.

SC.1.E.6.3, SC.2.P.13.1, SC.2.P.13.4, SC.4.P.10.1, SC.4.P.10.2, SC.5.P.10.1, SC.5.P.13.2, SC.5.P.13.3,

7. **Rotation Station**- Students stand on a turntable to feel the rotation. When an object is rotating it has _____ inertia.

SC.1.E.6.3, SC.2.P.13.1, SC.2.P.13.4, SC.4.P.10.1, SC.4.P.10.2, SC.5.P.10.1, SC.5.P.13.2, SC.5.P.13.3,

8. **Sorting Teeth**- Students are asked to classify bones. Since a shark only eats other animals with its sharp teeth, it is considered a _____vore.

SC.K.L.14.3, SC.K.P.8.1, SC.1.E.5.3, SC.1.E.6.1, SC.1.P.8.1, SC.4.P.10.1,

9. **Balance**- Concepts on center of gravity. If something is balanced then the forces are _____ .

SC.1.E.5.2, SC.2.P.13.1, SC.3.N.1.6, SC.4.P.10.1, SC.4.P.10.2, SC.5.P.10.1,

10. **Astronomy**- Students will get to explore the Earth's sky to the outer edge of the universe.

Earth is covered primary by _____.

SC.K.E.5.1, SC.K.E.5.2, SC.K.E.5.3, SC.K.E.5.4, SC.K.E.5.5, SC.K.E.5.5, SC.K.E.5.6, SC.1.E.5.1, SC.1.E.5.2, SC.1.E.5.4, SC.1.E.6.1, SC.1.P.8.1, SC.2.E.6.1, SC.2.E.7.2, SC.2.E.7.4 , SC.2.P.13.1 , SC.2.P.13.4, SC.3.E.5.1, SC.3.E.5.2, SC.3.E.5.3, SC.3.E.6.1, SC.3.P.10.1, SC.3.P.10.3, SC.3.P.10.4, SC.3.P.11.1, SC.4.E.5.1, SC.4.E.5.2, SC.4.E.5.3, SC.4.E.5.4, SC.4.P.10.1, SC.5.E.5.1, SC.5.E.5.3, SC.5.P.10.1,

11. **Sound Effects**- Learn how sound works and then try to create new sounds. Humans have tiny _____ that pickup sound waves.

SC.K.P.10.1, SC.1.P.8.1, SC.4.P.10.1, SC.4.P.10.2, SC.5.P.10.1,

12. **Magnetic Play Station**- Learn about how polarized objects interact. If two objects polarity are the same, then they will _____.

SC.1.P.8.1, SC.2.P.13.1, SC.2.P.13.2, SC.4.P.10.1, SC.4.P.10.2, SC.4.P.8.4, SC.5.P.10.1, SC.5.P.10.3,

13**. Conductor**- Demonstrate that people are conductors of electrical energy. Conductors _____ the flow of energy.

SC.2.P.13.1, SC.3.P.10.1, SC.4.P.10.1, SC.5.P.10.1, SC.5.P.11.2,

14. **Circuits**- Build a circuit using several pieces. _____ convert energy and make it visible.

SC.2.P.10.1, SC.3.P.10.1, SC.3.P.10.2, SC.4.P.10.1, SC.4.P.10.2, SC.5.P.10.1, SC.5.P.10.4, SC.5.P.11.1,

15. **Electromagnet**- Compare the strength of a magnet with and without electrical power added. _____ makes magnets stronger.

SC.2.P.10.1, SC.2.P.13.1, SC.3.P.10.1, SC.3.P.10.2, SC.4.P.10.1, SC.4.P.10.2, SC.5.P.10.1, SC.5.P.10.3, SC.5.P.10.4,

16. **Robotics**- Use a complex circuit to move objects. _____ controls the movement of each motor.

SC.2.P.10.1, SC.3.P.10.1, SC.3.P.10.2, SC.4.P.10.1, SC.4.P.10.2, SC.5.P.10.1, SC.5.P.10.4,

***Exhibits are subject to availability**