

Model Statements	Activities	Performance Expectations/DCIs
<p>1. Stuff is made of something we call matter.</p> <p>2. Matter is made of tiny particles, too small to see.</p>	<p>Nosey Balloons</p>	<p>5-PS1-1. Develop a model to describe that matter is made of particles too small to be seen.</p> <p>PS1.A: Structure and Properties of Matter Matter of any type can be subdivided into particles that are too small to see, but even then the matter still exists and can be detected by other means. A model shows that gases are made from matter particles that are too small to see and are moving freely around in space can explain many observations, including the inflation and shape of a balloon; the effects of air on larger particles or objects.</p> <p>PS3.B: Conservation of Energy and Energy Transfer Energy is present whenever there are moving objects, sound, light, or heat. When objects collide, energy can be transferred from one object to another, thereby changing their motion. In such collisions, some energy is typically also transferred to the surrounding air; as a result, the air gets heated and sound is produced. (4-PS3-2),(4-PS3-3)</p>
<p>3. Particles move</p> <p>4. Particles that have more energy move faster.</p> <p>5. Temperature is a measure of how fast the particles are moving.</p>	<p>Mesmerizing Colors</p>	<p>MS-PS3-3. Apply scientific principles to design, construct, and test a device that either minimizes or maximizes thermal energy transfer</p> <p>PS3.A: Definitions of Energy Temperature is a measure of the average kinetic energy of particles of matter. The relationship between the temperature and the total energy of a system depends on the types, states, and amounts of matter present.</p>