Science 3 – 5 for use with NGSS 2013:

Physical Science: Matter and Its Interactions

Particle Model of Matter

Students	Learning Continuum Statements:
Students:	**RIT 181-190:** • Infers that objects of different shapes and/or sizes can be made from the same set of smaller pieces, using observations
Students:	**RIT 191-200:** • Applies a particle model of matter to explain the expansion and compression of objects and substances • Relates molecular/particle motion and spacing to the states/phases of substances, using a model • Develops and uses models to demonstrate that gases are made of unseen particles • Infers that objects of different shapes and/or sizes can be made from the same set of smaller pieces, using observations
Students:	**RIT 201-210:** • Applies a particle model of matter to explain the expansion and compression of objects and substances • Relates molecular/particle motion and spacing to the states/phases of substances, using a model • Relates molecular/particle motion and spacing to changes in temperature/heat/thermal energy of a substance, using a model
Students:	**RIT 211-220:** • Applies a particle model of matter to explain the expansion and compression of objects and substances • Applies scientific ideas to explain how molecular movement affects the density of substances in different states of matter • Relates molecular/particle motion and spacing to the states/phases of substances, using a model • Relates molecular/particle motion and spacing to state/phase changes of substances • Relates molecular/particle motion and spacing to changes in temperature/heat/thermal energy of a substance, using a model

Students:

RIT 221-230:

- Applies a particle model of matter to explain the expansion and compression of objects and substances
- Relates molecular/particle motion and spacing to changes in temperature/heat/thermal energy of a substance, using a model