Quality First Education Trust

Wider Curriculum Unit Plan for Home learning Autumn 2020		
Subject: Science	**Unit:** Solids, liquids and gases and Working Scientifically	**Year:** 4

Session	Lesson tasks
Week 1 Session 1	**What are the properties of solids, liquids and gases?** • *In this lesson we will learn about the three states of matter, the properties of each state of matter and how to identify which state of matter a substance is in.* • Watch the lesson 1 video • Complete the activities as you watch
Week 1 Session 2	**How do particles behave inside solids, liquids and gases?** • *In this lesson, we will learn that all matter is made up of particles. Particles are arranged in different ways in solids, liquids and gases giving them different properties. We will also learn how scientists use diagrams to represent the arrangement of particles* • Watch the Lesson 2 video • Complete the activities as you watch
Week 2 Session 3	**What happens when you heat or cool each state of matter?** • *In this lesson, we will learn what happens to the behaviour and arrangement of particles when they are heated or cooled. We will also investigate some uses of these properties such as cooling gases in order to store them.* • Watch the Lesson 3 video • Complete the activities as you watch
Week 2 Session 4	**What are changes of state and why do they take place?** • *In this lesson, we will learn about what happens when substances are heated or cooled enough to change state. We will learn about the four main state changes and identify examples of each of them.* • Take the quiz and watch the Lesson 4 video • Complete the activities as you watch
Week 3 Session 5	**What are melting points and boiling points?** • *In this lesson, we will learn about how scientists measure temperature, two major 'fixed points' of a substance (melting and boiling point) and how we can determine the state of matter of a substance at a particular temperature when given these fixed points.* • Watch the Lesson 5 video • Complete the activities as you watch
Week 3 Session 6	**Which substances do not fit into one state of matter?** • *In this lesson, we will learn about substances, like sand, that do not fit into one state of matter. We will also learn about non-Newtonian fluids and investigate their properties.* • Take the quiz and watch the Lesson 6 video • Complete the activities as you watch
Week 4 Session 7	**What is a variable?** • *In this lesson we will learn about the three types of variables in scientific investigations.* • Watch the video lesson: What is a variable? • Complete the activities as you watch
Week 4 Session 8	**How do you draw a scientific diagram?** • *In this lesson we will compare diagrams and illustrations and learn how to draw accurate diagrams for scientific investigations.* • Take the quiz and watch the lesson video • Complete the activities as you watch •
Week 5 Session 9	**Why is a method important?** • *In this lesson we will learn how to structure a written method for a scientific investigation.* • Take the quiz and watch the lesson video • Complete the activities as you watch

Week 5 Session 10	**What can we do with data we collect?** • *In this lesson we will learn how to draw an accurate table of results for your scientific investigation.* • Take the quiz and watch the lesson video • Complete the activities as you watch
Week 6 Session 11	**How can we communicate our results?** • *In this lesson we will learn how to structure a conclusion for writing up a scientific investigation* • Take the quiz and watch the video • Complete the activities as you watch
Week 6 Session 12	**How can we record an entire investigation?** *In this lesson we will write up an entire scientific investigation using the techniques and structures we have learned about throughout this unit.* • Take the quiz and watch the video • Complete the activities as you watch