

Moving Monsters : DT : Year 3

	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To investigate a variety of familiar objects that use air to make them work.	Children will think of objects that use air to make them work, then examine, sketch, label and/or describe a variety of these kinds of objects.	<ul style="list-style-type: none"> Can children recognise familiar objects that use air to make them work? Can children describe how the objects use air to make them work? Can children suggest alternative uses for these familiar objects? 	<ul style="list-style-type: none"> Slides Worksheet 1A/1B/1C Range of objects that use air (FSD? activity only)
Lesson 2	To investigate techniques for making simple pneumatic systems.	Children will learn about simple pneumatic systems. They are then challenged to make a variety of simple pneumatic systems according to given instructions using basic equipment.	<ul style="list-style-type: none"> Can children explain how simple pneumatic systems work using appropriate vocabulary? Can children create simple pneumatics systems? Can children suggest ways of using these pneumatic systems in moving monsters? 	<ul style="list-style-type: none"> Slides Syringes, tubing, balloons, plastic bottles, straws, etc. Challenge Cards A/B Worksheet 2A
Lesson 3	To be able to gather ideas for creating moving monsters.	Children will begin to develop ideas about the use of pneumatic systems in a moving monster toy/model. They may then either attempt more complex challenges where they will build pneumatic systems according to given instructions, or design pneumatic systems for a given toy design.	<ul style="list-style-type: none"> Can children investigate ways of using pneumatic systems with other materials to control movement? Do children know of different techniques for joining and fixing components? Can children make effective pneumatic systems? 	<ul style="list-style-type: none"> Slides Syringes, plastic bottles, tubing, card, straws, burger boxes, masking tape, etc. Challenge Sheet Worksheet 3A Monster Cards (FSD? activity only) Worksheet 3B (FSD? activity only)
Lesson 4	To be able to design a monster including a moving pneumatic system.	Children will continue to develop their ideas about the use of pneumatic systems in a moving monster toy/model. They will then finish drawing, annotating and describing their own designs.	<ul style="list-style-type: none"> Can children use their knowledge of pneumatic systems to design a moving monster part? Can children describe what materials and components they will need to create their monster? Can children identify areas that could be improved upon in their design? 	<ul style="list-style-type: none"> Slides Worksheet 4A/4B A3 paper (FSD? activity only)
Lesson 5	To be able to make a monster with a moving pneumatic part.	Referring to their designs from the previous lesson, children will create their moving monster toys/models.	<ul style="list-style-type: none"> Can children create a monster based on a design? Can children construct an effective pneumatic system to control movement? Can children work safely and effectively with a range of tools and techniques? 	<ul style="list-style-type: none"> Slides Designs from lesson 4 Syringes, plastic bottles, balloons, tubing, straws, card, masking tape, scissors, craft knives, etc.
Lesson 6	To be able to evaluate a finished product.	Children will demonstrate their finished moving monster toys/models, then evaluate both their process and their finished product, either individually or with a partner.	<ul style="list-style-type: none"> Can children identify successful areas of their finished products? Can children identify areas that could be improved upon? Can children describe what they would do differently if they were to make their moving monster again? 	<ul style="list-style-type: none"> Slides Finished moving monsters Worksheet 6A/6B Worksheet 6C (FSD? activity only)