



EXPECTATIONS at the end of this unit	Science- Forces 1 Year 1
<i>most children will:</i>	Observe, describe and compare how familiar things move Use the words push and pull to describe how things move <i>Record observations in sets</i>
<i>some children will not have made so much progress and will:</i>	Observe and describe how everyday objects move <i>Record observations through talking and drawing</i>
<i>some children will have progressed further and will also:</i>	Describe and explain how a kite or bubbles are made to move e.g. air pushing Use appropriate vocabulary to compare how everyday objects move e.g. further, faster, slower, slowest etc. Know that pushes and pulls are forces <i>Make measurements of length in non standard units and present them in a table</i>
<i>Challenge activities</i>	Describe and explain forces by linking simple cause and effect Explain why different surfaces affect how far a toy car or ball travels



EXPECTATIONS at the end of this unit		Science- Sound Year 1/2
<i>most children will:</i>	<ul style="list-style-type: none">• Describe and compare a variety of sounds using appropriate vocabulary• Suggest how to change the sound of an instrument• Describe what they observe when they move further away from a source of sound• Know that sounds are heard when they enter the ear.• <i>Record observations and talk about what happened.</i>	
<i>Some children will not have made so much progress and will:</i>	<ul style="list-style-type: none">• Recognise and talk about a variety of sounds.• Know that sounds come from a variety of sources.• Make a variety of sounds on everyday materials and familiar instruments.	
<i>Some children will have progressed further and will also:</i>	<ul style="list-style-type: none">• Recognise that sounds are made when an object vibrates.• Explain how to change sounds e.g. the sound is louder because I hit the drum harder.• Suggest ways of changing the sound in a variety of different instruments.	
<i>Challenge activities</i>	<ul style="list-style-type: none">• Use knowledge and understanding of physical phenomena to link cause and effect in simple explanations.• Begin to make simple generalisations about physical phenomena (e.g. explaining that sounds they hear become fainter the further they are from the source)• Know that sounds travel through the air.• Know that people hear sound because sound travels from a sound source.• Use descriptions to compare and order sounds (e.g. as quieter or louder).	



Science Planning - Forces, Sound

Year 1/2

Beech/Maple/Cherry Class

Spring Term 2004

Week	Learning Intention	Ref	Teaching & Learning Activities	Success Criteria	Points to note Curriculum Links Resources
			Forces		
1	YR: To explore objects that can be moved by pushing pulling.	KUW2 Blue stepping stone	YR: Use large wheeled toys/playground equipment/toy cars, children explore ways of making them move. Enrichment: Investigate pushing and pulling a large flat object like a small table lying face down, on its four legs or large flat box, along the ground.	YR: Explore pushing and pulling	Resources: YR: large wheeled toys, toy cars
	Y1: Show what they know about how we make things move. Y2: Show what they remember about pushes and pulls	Sc4 2b	Ask ch to describe how they make things go. E.g. swings, roundabouts, toys. Ask them to tell you how they open a drawer, door. -Draw some examples of 4 pushes and 4 pulls. Make a poster of all their ideas about how they make things move or do everyday actions such as pulling their socks on. Knowledge: How can you make things move? - dance the hokey cokey add parts, play Simon Says. Find three things with moving parts.- classroom search for moving objects. Comprehension: What moves these things? Application: Can you guess the activity from the movement? – Mime something/body is moving. Guess and describe. Analysis: <i>Compare</i> - the movement of three different toys. Synthesis: <i>Predict</i> -What would happen if you made a bigger push? Evaluation: <i>Debate</i> - Do you give everything the same-sized push/pull?	Y1: L: Observe, describe and compare how familiar things move M: Observe, describe and compare how familiar things move H: Use appropriate vocabulary to compare how everyday objects move e.g. further, faster, slower, slowest etc. H*: Describe and explain forces by linking simple cause and effect Y2: L: Describe how to change the movement of everyday objects using pushes and pulls M: Recognise that pushes and pulls are examples of forces H: Describe and explain forces by linking simple cause and effect H*: Link cause and effect in simple explanations e.g. the direction or speed of movement of an object changing because of a push or pull.	Range of push/pull toys
2	YR: To explore objects that can be moved by pushing pulling.	KUW2 Blue stepping stone	YR: Children play with a variety of balls in the outside area finding different ways to make them move. In PE focus children's attention on pushing or pulling with parts of their body. E.g. pushing with feet, pulling with their hands. Children play with a variety of toy boats, ducks etc in the water tray, finding out different ways to make them move,	YR: Explore pushing and pulling – Shows curiosity, observes and manipulates objects.	Resources: YR: variety of balls, water trays, toy boats, ducks etc

	<p>Y1: To find out about and describe the movement of familiar things. Y2: Know that pushes and pulls are examples of forces.</p>	<p>Sc4 2a Sc4 2b</p>	<p>Observation of what happens e.g. when ch play with cars, run them down ramps. Use only toys which are started by pushes or pulls. Leave twists and turns until later. Leave gravity, magnetic, elastic and spring or clockwork toys until KS2, although ch should have play experience of them at KS1. Begin to use the word force interchangeably with pushes and pulls. – what force does the car need to make it go? What force make the boat come towards me? Etc. Knowledge: How many ways can you move? – In P.E/outside show ways to move.-make a collage ore zigzag book of things that ch do which involve a push or a pull e.g. pedal a bike, push a door shut or pull a door open. Comprehension: Can you draw symbols to show direction of movements? – add arrows to pictures to show the direction of force. Analysis: What force is being used? – <i>Explain</i> forces used for a task as instructions. Synthesis: <i>Compose</i> and illustrate a poem using movement words. Evaluation: (Black hat) – judge which force causes most damage e.g. wind versus flood – natural forces.</p>	<p>Y1: L: Observe and describe how everyday objects move M: Use the words push and pull to describe how things move H: Describe and explain forces by linking simple cause and effect H*: Describe and explain forces by linking simple cause and effect Y2: L: Describe how to change the movement of everyday objects using pushes and pulls M: Recognise that pushes and pulls are examples of forces H: Describe and explain forces by linking simple cause and effect H*: Sequence pushes and pulls in order of magnitude.</p>	<p>Toy cars, ramps, surfaces H*: range of push/pull objects literacy</p>
3	<p>YR: To observe and begin to describe the movement of objects and the direction objects move.</p>	<p>KUW4 Blue stepping stone</p>	<p>YR: Using large wheeled toys and /or playground equipment, challenge the children to find ways of going faster, slower and changing direction. Enrichment: Using toy cart investigate the effect of increasing the weight in the cart on the distance and time for it to roll down a slope.</p>	<p>Can describe what is happening.</p>	<p>Resources: YR: large wheeled toys</p>
	<p>Y1: Know that we use pushes and pulls all the time in everyday life and these are examples of forces.</p>	<p>Sc4 2b</p>	<p>Discuss/illustrate a picture diary of simple daily events which involve pushes and pulls e.g. putting on hat, opening door. Find five things in the classroom they can push and pull, e.g. stapler, sellotape on a roll, placing a piece of jigsaw. Directly feel the sizes of pushes needed to move different sized objects. Think of a very big pull, a small pull and a middle sized pull. Draw or write their ideas. Comprehension: show pictures with a force about to happen. Look at pictures and <i>state</i> which force – wind, water, push, pull etc .. Analysis: <i>Order</i> objects according to the sensation of the size of the force needed to move them. What are the effects of these pushes or pulls? Synthesis: - <i>Predict</i> what will happen next. Imagine flood/hurricane disaster – Make a cartoon strip of a flood/hurricane. Evaluation: <i>Recommend</i> how would you measure the size of a push or a pull?</p>	<p>Y1: L: Record observations through talking and drawing M - Record observations in sets H - Use appropriate vocabulary to compare how everyday objects move e.g. further, faster, slower, slowest etc. H*: Appreciate that machines, wind, waves etc. can exert pushes and pulls.</p>	<p>Range of class room objects e.g. sellotape, stapler, scissors, jigsaw</p>
	<p>Y2: Know that forces can make things speed up, slow down, or change direction.</p>	<p>Sc4 2c</p>	<p>Y2: Use a balloon pump, stiff card or bicycle pump to flap or blow a shape across the floor. Can the children make it travel faster? Discuss with them what they had to do to make it move faster and what it is that makes the shape move across the desk. Analysis: – children to blow bubbles. Set challenges such as can you make the bubbles come out quicker? Do it in the open air and ask them why the bubbles move sideways. Why do they slow down as they move away from the blower? Synthesis: <i>Propose</i> how can you tell if something is a push? Evaluation: <i>In your opinion</i> is your push always the same size?</p>	<p>Y2: L: Describe how to change the movement of everyday objects using pushes and pulls M - Describe and compare how pushes and pulls make everyday objects speed up, slow down and change direction H - Describe and explain forces by linking simple cause and effect H*: Know that pushes and pulls can be used to bring objects to a stop more quickly.</p>	<p>Balloons pump/card, news/tissue paper H*: bubble blower</p>

4	YR: To observe and begin to describe the movement of objects and the direction objects move.	KUW4 Blue	YR: Using toy cars/boats, ball collection, ask children what they need to do to make it go faster, slower and change direction e.g. push more, hit it harder, blow more. Enrichment: Try to gain an appreciation that the amount of surface in contact with each other is important – relate this to the movement of objects.	Can predict and discuss what they have seen / what is happening.	Resources: YR: toy boats/cars/balls.
	Y1: Know that movement is caused by simple pushes and pulls and these are forces. Know that twists and turns are different types of pushes and pulls.	Sc4 2a, 2c Sc1 – Obtaining 2b, 2c Sc4 2b	Forces – cars down ramps: alter height of ramp. At a certain height the car will just fall off the ramp. Encourage the children to notice and discuss (may introduce gravity here) When introducing the idea of fair testing it helps to deliberately do something unfair. Use strips of paper/string Introduce the word force and tell children that when we push or pull something this is called a force. Bring in plastic bottles with tops and ask ch to undo them. Comprehension: Ask them to <i>describe</i> what they are doing e.g. turn, twist. Introduce new toys such as spinners which need to be twisted or toys which need something turning to make them work and use other words besides push and pull, e.g. twist, turn, swirl, screw, Analysis: <i>compare</i> a object that twists and one that does not – identify differences Synthesis: <i>design</i> a game (cogs) that can move a marble from one side to the other using twisting force	Y1: L: Observe and describe how everyday objects move M - Observe, describe and compare how familiar things move H - Know that pushes and pulls are forces H*: Describe and explain forces by linking simple cause and effect	Cars, ramps, string H*; plastic bottles with screw tops, spinning toys, cog game, marble
	Y2: Know that when pushes and pulls make things speed up, slow down or change direction there is a cause.	Sc4 2c	Children play blow football. Ask them how they can make the ball go faster (blow harder, more force), slow down or swerve. Analysis: How can we make a car go further? Possible ideas might be : push harder, roll down slope, make steeper slope. Synthesis: Can you use any ball in all ball games? – invent an outdoor ball game and write the rules. Enrichment: take a balloon, fix it over the open mouth of a plastic bottle and stand the bottle in a bowl of hot water and watch carefully what happens. Describe what they see and say why they think that happens.	Y2: L: Describe how to change the movement of everyday objects using pushes and pulls M - Describe and compare how pushes and pulls make everyday objects speed up, slow down and change direction H - Identify simple patterns in results H*: Know that pushes and pulls can be used to bring objects to a stop more quickly.	Ping-pong balls, straws, H*; car, ramps, bottles balloons, water tray
5	YR: To observe and begin to describe the movement of objects and the direction objects move.	KUW4 Green stepping stone	YR: Place water wheels in water tray. How can the children make them turn more quickly and more slowly? Set out different hoops in outside area at different distances, asking children to throw a ball/bean bag into the hoop. What did they do to make it go to the furthest hoop? Enrichment: Investigate the effect of different sized pourers – holes in bottles, spoons,	Talks about his/her observations	Resources: YR: water wheels, water tray, hoops, balls/bean bags

	Y1: Know that blowing things is a type of push.	Sc4 2b	<p>Introduce new toys e.g. party blow, wind mill on a stick, blow football, straws and table tennis, toy boat with sail, bubble blowers etc.. ask children to try them out and describe what they do to make them work. Introduce ideas of blowing is a push and so a force.</p> <p>Ask them to think of pushes and pulls done by animals, by machines or by wind rather than by people.</p> <p>Comprehension: What is the effect of this push or pull?</p> <p>Application: Draw and write two pushes and two pulls that are not done by people. Talk about the effects of these pushes and pulls. Classify pushes/pulls according to whether they are a result of animals, wind or machines.</p> <p>Analysis: How does the push affect different objects?</p> <p>Synthesis: Can you create a blowing game? – make a football or flapping fish type game.</p> <p>Evaluation: Rank instances of pushes and pulls according to magnitude. Consider the effects of pushes and pulls on direction of moving objects.</p>	<p>Y1: L: Observe and describe how everyday objects move M: Observe, describe and compare how familiar things move H - Describe and explain how a kite or bubbles are made to move e.g. air pushing</p> <p>H*: Describe and explain forces by linking simple cause and effect</p>	<p>Party blower, windmill, ping-pong ball straw, toy sail boat</p> <p>H*; straws, tissue/news paper</p>
	Y2: Know that different surfaces act as a stopping force.		<p>(A simple introduction to friction where children recognise that carpet, etc, slows their toys down because it is rough or patterned shoes are good for gripping). Give children the opportunity to run toy cars down a ramp and on to different surfaces, e.g. carpet, tiles, concrete, grass. Ask children to observe which is best and which is worst for their car and then try to give a simple explanation eg. The grass is bumpy or the carpet is hairy and makes the car go slower or not so far; the tiles are hard or smooth and the car goes further or faster.</p> <p>Synthesis: Forecast the surface most suitable for...</p> <p>Evaluation: Recommend the best surface for...</p>	<p>Y2: L: Make comparisons of length and record these in drawings or on a prepared table with help M: Make measurements of length in non standard units and present them in a table H - Explain why different surfaces affect how far a toy car or ball travels</p> <p>H*: Relate conclusions to patterns in data and to scientific knowledge and understanding.</p>	<p>Ramps, cars, range of surfaces,</p>
6	YR: To observe and begin to describe the movement of objects and the direction objects move.	KUW4 Green stepping stone	<p>YR: 'Who can push their ball the furthest?' This could be carried out in the outside area/play ground/hall. Encourage children to make comparisons and think why some balls went further than others. Put a variety of balls in the water tray and let children experience pushing then under the water to see what happens when they let go.</p> <p>Read the story of 'Mr Gump's outing' or 'The enormous Turnip' and act out the actions of pushing the car and pulling the turnip</p> <p>Enrichment: Investigate the effect of fusing a number of pencils as rollers under the surface of a box.</p>	<p>Observing and making comparisons, talk about what happened.</p>	<p>Resources: YR: variety of balls water tray,</p>
	Y1: To carry out an investigation	Sc4 2a,2d Planning/Obtaining 1c, 2b, 2c	<p>Stretching forces - e.g. stretching tights Introduce the idea that the tights stretching is like a tug-of-war, the weight is pulling the tights down. The material is pulling the tights up – (resistance). Put in weights, do not drop them in. Use tights that are the same size but different colours and materials e.g. lacy, woolly, 50 denier</p> <p>H*: Falling bodies. Investigate the material of the ball by squashing and generally feeling it. Next investigate the way different types of balls bounce, especially the height and number of bounces. Try to model the way balls bounce by using 'plasticine' rolled into balls some the same and others different size. Pupils investigate the effect of increased mass and increasing height on the depression of the 'plasticine' ball on impact. Pupils can measure the height the 'plasticine' ball is dropped from and the size of flattened surface. They can measure the mass of the 'plasticine' ball and the size of flattened surface. Using these results they relate the 'plasticine' ball results to the collection of balls and look for patterns in the way a ball acts when it hits the ground.</p>	<p>Y1: L: Record observations in sets M - Make measurements of length in non standard units and present them in a table H - Make measurements of length using standard units and present these in a bar chart</p> <p>H*: Explain why different surfaces affect how far a toy car or ball travels</p>	<p>Tights (different denier) weights</p> <p>H*; Resources: a range of balls made from different materials e.g. rubber, plastic, 'plasticine' wood. – from different sports backgrounds, e.g. tennis, football, hockey, cricket, basket ball, squash,</p>

	Y2: To carry out an investigation – know that forces can change the shape of objects.	Sc4 2d	<p>Big and small balloons. Teacher blows a balloon up and the pupils are asked to watch and describe what happens. They are asked to work out why the balloon gets bigger. Repeat with different shaped balloons. Try to reach the idea air is being forced into the balloon. Pupils blow up a balloon themselves to experience the 'pushing in' of air.</p> <p>Pupils take another round balloon and put a tiny pinhole in the main body. They blow the balloon up while a partner describes what they see and feel at the hole. It is important the hole is small.</p> <p>They blow up two balloons. Tie them so the air cannot escape. One they stick a pin in and describe the effect. The other they squeeze and note what happens to the shape.</p> <p>synthesis: <i>investigate</i> drinking with a straw and why the liquid goes into the tube – relate air pressure to the push they can feel when they go deeper in a swimming pool.</p>	<p>Y2: L: <i>Communicate their observations of an investigation</i> M- Make measurements of length in non standard units and present them in a table. Say what the results of a test show H - Make measurements of length using standard units and present these in a bar chart Recognise and explain when a test is unfair and demonstrate how to make it fair</p> <p>H*: <i>Relate conclusions to patterns in data and to scientific knowledge and understanding.</i></p>	<p>Balloons – range of sizes, pins</p> <p>H*; straws and water</p>
			Half term		
			Sound		
7	YR: to listen and begin to identify some everyday sounds.	KUW 2 Blue stepping stone	<p>YR: Take children on a walk in the school grounds stopping at various places. Ask them to close their eyes and listen to the sounds they can hear. Read 'Peace at last'. Talk about the sounds children hear at night.</p> <p>Enrichment:</p>	<p>Describes simple features of objects and events. FSP KUW 3 – Identifies obvious similarities and differences when exploring and observing.</p>	<p>Resources: YR: 'Peace at last'</p>
	Y1/Y2: Show what they know about sounds. Hear and identify sounds from a variety of sources..	Sc4 3c Sc1 – Planning/Considering 1b, 3a, 3c	<p>Take children on a sound walk around the school or around the local environment. Ask them to draw or write about the sounds they hear as they are walking. Can they distinguish between natural and man-made sounds?</p> <p>Investigate sound production: Use clear containers to develop prediction skills. Create sound bank of words related to sounds created. Ask Y1/2 to talk about how the sounds different and what they think causes the differences, Record ordering pictorially.</p> <p>Comprehension: Give children a selection of objects that make a sound. Handle objects and describe how the sounds are made. Describe the differences they notice between them.</p> <p>Analysis: <i>distinguish</i> between man-made and natural sound Synthesis: <i>compare and order</i> instruments and say state criteria used</p>	<p>L: Recognise and talk about a variety of sounds. M: Describe and compare a variety of sounds using appropriate vocabulary H: Recognise that sounds are made when an object vibrates.</p> <p>H*: Use descriptions to compare and order sounds (e.g. as quieter or louder).</p>	<p>Resources: chime bars, screen, TA for sound walk, sticks, shell, bells, paper, water and containers, instruments, range of classroom objects</p> <p>Music</p> <p>PHSCE</p> <p>Geography – school</p>
8	YR: to explore making a range of sounds.	KUW 2 Blue stepping stone	<p>YR: Explore a variety of musical instruments. Give children a selection of objects e.g. tins, yoghurt pots, plastic bottles and a variety of things to put inside then so they can experience making different sounds.</p> <p>Enrichment: Investigate instruments and sort into similar sounds. Use own criteria to sort e.g loud, soft, scratchy, etc.</p>	<p>Expresses observations in simple sensory terms e.g. its loud, it's noisy. FSP KUW 3</p>	<p>Resources: YR: variety of musical instruments CD2</p>
	Y1/Y2: Make a variety of sounds using own body and everyday materials.	Sc4 3c	<p>Explore all the different sounds children can make with their bodies. E.g. voice, hands, feet, in a small group one child makes a body sound from behind a screen. Children choose an object from a sound bag e.g. springs, shells, bubble wrap, etc. and ask them to make as many different sounds with the object. Can the children guess which part of the body was used to make the sound?</p> <p>Comprehension: Can the children describe the sounds they are making?</p> <p>Analysis: <i>identify</i> the route the sounds makes from the sound maker to the listener Synthesis: <i>propose what stops us from hearing sounds – situations when we can't hear</i> Evaluation; <i>Recommend</i> the best environment to listen to e.g. teacher/TV etc.</p>	<p>L: Know that sounds come from a variety of sources. M: Describe and compare a variety of sounds using appropriate vocabulary H: Recognise that sounds are made when an object vibrates.</p> <p>H*: Know that people hear sound because sound travels from a sound source.</p>	

9	YR: to talk about their observations	KUW 2 Green stepping stone	YR: provide everyday utensils e.g. pans, wooden spoons, plastic spoons, whisks, lids, tins etc for children to make different sounds. Enrichment: Investigate the fillings and sort from loudest to quietest.	Examines objects to find out more about them. FSP KUW 4 – Investigates things by using all the senses as appropriate. Identifies some features and talks about those features s/he likes and dislikes.	Resources: YR: kitchen utensils, variety of containers with lids, a variety of fillings e.g. pasta, beads, corks, etc,
	Y1/Y2: Sort sounds in a variety of ways including putting them in order by observation and testing. Find ways of changing sounds..	Sc4 3c	Comprehension: Give children two different instruments e.g. drum and bells. Can they describe and compare the sounds they make? Make shakers with different fillings e.g. rice, paper clips, stones, shells etc. Can the children order the shakers from loudest to softest? Application: Can they make a louder or softer shaker? Analysis: <i>Comparison</i> of instruments Synthesis: <i>hypothesise</i> which material would make the best shaker and explain criteria Evaluation: <i>judge</i> the best material to make a shaker and <i>verify</i> criteria	L: Make a variety of sounds on everyday materials and familiar instruments. M: Suggest how to change the sound of an instrument H: Explain how to change sounds e.g. the sound is louder because I hit the drum harder. H*: Know that sounds travel through the air.	Drum, bell, rice, paper clips, stones, shells H*: pots/cups, pasta, rice, cotton wool, buttons, cotton reels,
10	YR: to talk about their observations	KUW 2 Blue stepping stone	YR: Make a sound trail (inside or out) e.g. walking through leaves, wind chimes, school bell, shaking a container of gravel, pieces of wood to bang and scrape etc Enrichment: Investigate use of two different media to develop an overlay of sounds.	Expresses observations in simple sensory terms e.g. its loud, it's noisy.	Resources: wind chimes, school bell, shaking a container of gravel, pieces of wood to bang and scrape etc
	Y1/Y2: To carry out an investigation with help.	Sc1 3e Sc1 Obtaining/Considering 2a, 2b, 3a, 3c	Investigate how sound travels: Play language games where they have to identify sounds or repeat phrases, such as Chinese whispers. Play telephones made with tubing, cardboard tubes and paper cones can be used to see which helps them hear voices best. They can also use stethoscopes to listen for quiet sounds, like heart beat or a ticking clock. Analysis: What will change the sound coming from a shaker? Synthesis: <i>Design</i> a telephone using everyday object Evaluation: <i>Discuss</i> why the phone designs would or would not work	<i>M: Record observations and talk about what happened.</i> H: Suggest ways of changing the sound in a variety of different instruments. H*: Use knowledge and understanding of physical phenomena to link cause and effect in simple explanations.	Tubing, yoghurt pots, string, hose, wooden telephone, stethoscope, shaker H*: pots, string, cones, thick wool, wire, twine, cotton, dowelling, tins, marg. tubs
11	YR: to talk about their observations	KUW 2 Green stepping stone	YR: Place some glass bottles in an empty water tray and let children put different amounts of water into each. Provide beaters (plastic or wood) for children to tap the bottles. (NB. THIS ACTIVITY WILL NEED CLOSE SUPERVISION – SAFETY) Enrichment: Arrange bottles to produce a series of sounds ranging from higher to lower. Use three notes to play tune e.g. beginning of three blind mice; ding, dong bell;	Expresses observations in simple sensory terms e.g. its loud, it's noisy. FSP KUW 5 – Asks questions about why things happen and how things work, Looks closely at similarities, differences, patterns and change.	Resources: YR: glass bottles, empty water tray, beaters (plastic or wood)
	Y1/Y2: Investigate how noises made further away sound fainter whilst those made nearer sound louder.	Sc4 3d	In the playground, one child plays an instrument while the rest of the class face away from the sound. Child continues to play and the class moves further away. Comprehension: What do they notice about the sound? Ask them to stop when they can no longer hear it. Can they explain why they cannot hear it any more? Let the children try the activity with different instruments. Ask them to explain what they have found out. Analysis: Identify different volumes of sound according to position Synthesis: Hypothesise where children would hear the sound from a drum faintest/loudest – record on pre-drawn diagram	L: Recognise and talk about a variety of sounds. M: Describe what they observe when they move further away from a source of sound H: Suggest ways of changing the sound in a variety of different instruments. H*: Begin to make simple generalisations about physical phenomena (e.g. explaining that sounds they hear become fainter the further they are from the source)	Instrument H*; recording diagram

12	YR: to talk about their observations	KUW 2 Green stepping stone	<p>YR: allow children to play with a variety of musical instruments. Encourage them to talk about the sounds they are making and what they need to do to make those sounds.</p> <p>Read the book 'Sounds my feet make' and let children explore making different sounds with their feet. E.g. on metal grids, in puddles, on leaves etc. They could try making sounds with different shoes/boots on as in the book.</p> <p>Enrichment: Make a game based on own book e.g. sounds my hands make.</p>	Expresses observations in simple sensory terms e.g. its loud, it's noisy.	Resources: variety of musical instruments; book 'Sounds my feet make' CD2
	Y1/Y2: Learn that sounds are heard when they enter the ear.	Sc4 -3d, Sc3 1e Sc1 – Obtaining 2a, 2b, 2c, Considering 3c	<p>Discuss with children how they think people hear. Ask them to explain their ideas. If they put their hands over their ears can they hear? Is the sound fainter or louder?</p> <p>Investigate sound insulation: Use sound bank of adjectives to describe sounds on tape. Y1/2 can explore the effects of putting their hands over their ears and wearing ear muffs/hats. Talk about how things sound quieter and different. Draw attention also to the times when they need to hear clearly, e.g. when listening for traffic. This an opportunity to emphasise the importance of avoiding damage to ears through poking them and from loud sounds.</p> <p>Comprehension: Can the children draw a picture to show how they hear a sound?</p> <p>Analysis: Explain why some people who have ears are deaf</p> <p>Synthesis: Design the best ears and explain</p> <p>Evaluation: Judge the best ears in the animal kingdom and explain</p>	<p>L: Know that sounds come from a variety of sources.</p> <p>M: Know that sounds are heard when they enter the ear.</p> <p>H: Know that people hear sound because sound travels from a sound source.</p> <p>H*: Use knowledge and understanding of physical phenomena to link cause and effect in simple explanations.</p>	Ear muffs, tape of sounds to describe, H*; pictures of animal ears