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# Foreword

By Chris Quigley



Some pupils need to focus on the very small steps that will help them along the way in their learning journey. That's the idea of *Pebbles*. It is a curriculum for pupils who are not ready to work on the milestones from our *Essentials Curriculum*\*.

*Pebbles* has been carefully researched and prepared by Dr Sue Fisher. I first met Sue ten years ago and her passion for helping all pupils to achieve their very best made for a lasting impression. I also learned of her frustration that the expertise of those working in special schools was not always available to those in mainstream schools. I am therefore delighted that Sue agreed to share with others, her significant and excellent understanding of the needs of pupils who, by the nature of their needs, will only make tiny steps of progress. *Pebbles* has been designed for pupils in mainstream schools on the special needs register.

## About Dr Sue Fisher

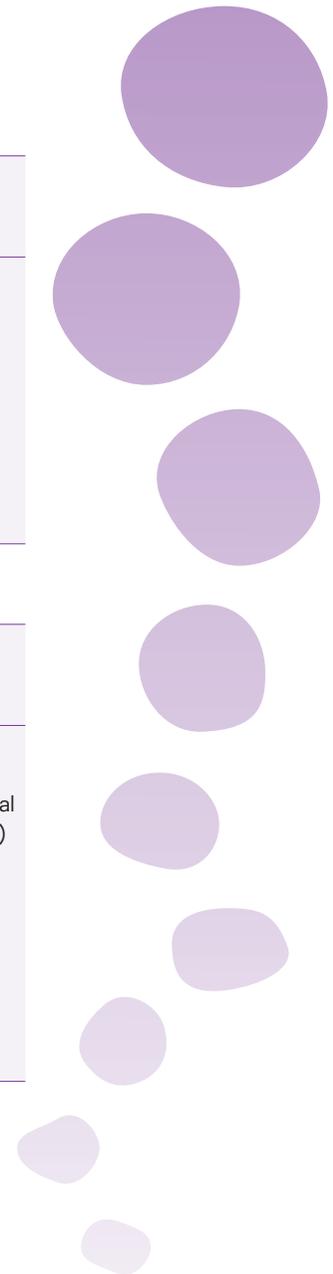
*Dr Sue Fisher qualified as a primary teacher in 1991 and has worked in primary, secondary and special schools across the North East. She qualified as an Educational Psychologist in 2005 and has worked with pupils with special educational needs and disabilities (SEND) supporting learning, assessment and progress for several years. She is currently Associate Director (Head Teacher) at an outstanding, non-maintained all age special school.*

\* *Essentials full · spectrum · curriculum* Chris Quigley Education Ltd 2013.

## To read words accurately

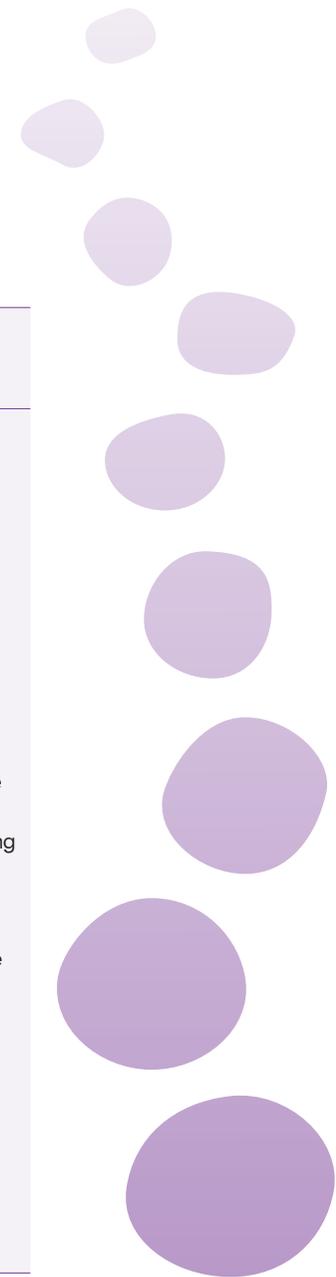
Pebble 4	Pebble 5	Pebble 6	Milestone 2
<ul style="list-style-type: none"> <li>Use morphemic knowledge to help to 'chunk' words to support accurate reading.</li> </ul>	<ul style="list-style-type: none"> <li>Read familiar and unfamiliar texts aloud confidently and competently.</li> <li>Sustain confidence and perseverance when reading larger, more demanding texts unaided.</li> </ul>	<ul style="list-style-type: none"> <li>Read independently a range of texts fluently and accurately.</li> <li>Use a range of strategies automatically to monitor and maintain meaning [e.g. prediction, post-reading reflection and self-correction].</li> </ul>	<ul style="list-style-type: none"> <li>Apply a growing knowledge of root words, prefixes and suffixes (etymology and morphology).</li> <li>Read further exception words, noting the spellings.</li> </ul>

Pebble 7	Pebble 8	Pebble 9	Milestone 3
<ul style="list-style-type: none"> <li>Read increasingly challenging material independently and accurately.</li> </ul>	<ul style="list-style-type: none"> <li>Choose and read books independently for challenge, interest and enjoyment.</li> <li>Decode and remember new words from increasingly challenging texts.</li> </ul>	<ul style="list-style-type: none"> <li>Develop knowledge of root words, prefixes and suffixes in direct teaching situations.</li> <li>Read a wide range of fiction and non-fiction accurately, including whole books, short stories, poems and plays with a wide coverage of genres, historical periods, forms and authors.</li> </ul>	<ul style="list-style-type: none"> <li>Apply knowledge of root words, prefixes and suffixes.</li> <li>(Note: this should be through normal reading rather than direct teaching.)</li> </ul>



# To understand texts

Pebble 1	Pebble 2	Pebble 3	Milestone 1
<ul style="list-style-type: none"> <li>Participate in shared activities and sustain attention for more than 2 minutes (e.g. listen to a shared story).</li> </ul>	<ul style="list-style-type: none"> <li>Predict words and signs/symbols in text, using expectations of meaning from the whole text and/or events in everyday life.</li> <li>Demonstrate understanding of elements of a story and be able to answer 'who?' 'where?' 'why?' and 'how?' questions.</li> <li>Understand that speech can be converted into writing and this writing can be read back by self or others.</li> </ul>	<ul style="list-style-type: none"> <li>Read simple unfamiliar texts independently with 90% accuracy, decoding some unknown words.</li> <li>Read longer phrases and more complex sentences, noticing punctuation and reading with greater expression.</li> <li>Make basic inferences and make predictions based on what has been read so far.</li> <li>Read texts, paying more attention to meaning; talk about what is read, demonstrating increased understanding.</li> </ul>	<ul style="list-style-type: none"> <li>Discuss events.</li> <li>Predict events.</li> <li>Link reading to own experience.</li> <li>Join in with stories or poems.</li> <li>Check that reading makes sense and self-correct.</li> <li>Infer what characters are like from actions.</li> <li>Ask and answer questions about texts.</li> <li>Discuss favourite words and phrases.</li> <li>Listen to and discuss a wide range of texts.</li> <li>Recognise and join in with (including role-play) recurring language.</li> <li>Explain and discuss understanding of texts.</li> <li>Discuss the significance of the title and events.</li> <li>Make inferences on the basis of what is being said and done.</li> </ul>



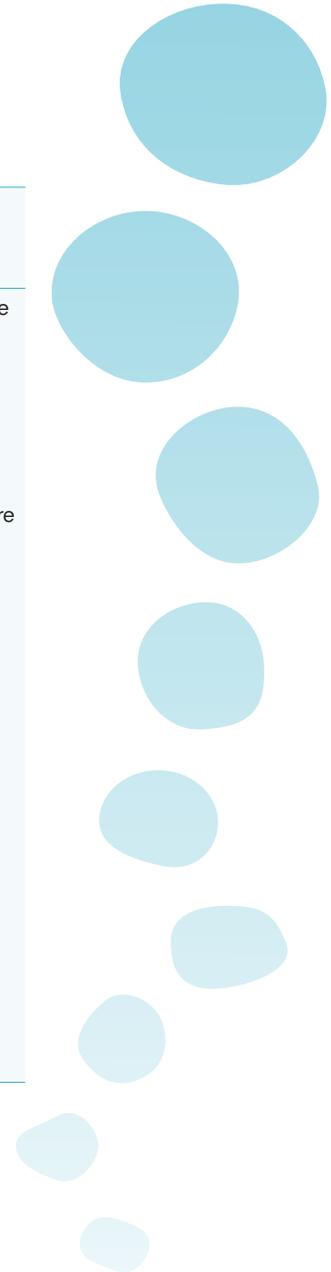
# To write with purpose

Pebble 1	Pebble 2	Pebble 3	Milestone 1
<ul style="list-style-type: none"> <li>Produce meaningful marks or symbols associated with own name, spoken words, actions, images or events.</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrate awareness that writing can have a range of purposes.</li> </ul>	<ul style="list-style-type: none"> <li>Write statements to communicate meaning to the reader, making some use of appropriate vocabulary.</li> </ul>	<ul style="list-style-type: none"> <li>Say first and then write to tell others about ideas.</li> <li>Write for a variety of purposes.</li> <li>Plan by talking about ideas and writing notes.</li> <li>Use some of the characteristic features of the type of writing used.</li> <li>Write, review and improve.</li> </ul>

Pebble 4	Pebble 5	Pebble 6	Milestone 2
<ul style="list-style-type: none"> <li>Write with imagination using some descriptive language.</li> </ul>	<ul style="list-style-type: none"> <li>Choose words for variety or interest, adding adjectives and adverbs to create interest.</li> <li>Choose more adventurous vocabulary and use words for effect.</li> </ul>	<ul style="list-style-type: none"> <li>Write to inform or entertain the reader.</li> <li>Review work and improve aspects following feedback.</li> </ul>	<ul style="list-style-type: none"> <li>Write for a wide range of purposes, using the main features identified in reading.</li> <li>Use techniques used by authors to create characters and settings.</li> <li>Compose and rehearse sentences orally.</li> <li>Plan, write, edit and improve.</li> </ul>

## To use imaginative description

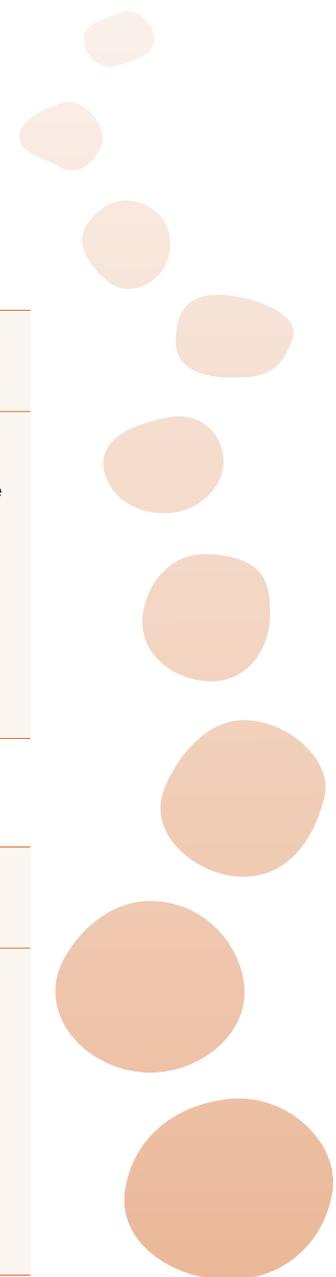
Pebble 7	Pebble 8	Pebble 9	Milestone 3
<ul style="list-style-type: none"> <li>Choose adventurous vocabulary to add detail and build descriptions.</li> </ul>	<ul style="list-style-type: none"> <li>Use words for effect.</li> <li>Produce writing that is varied and interesting using vocabulary to create effects.</li> </ul>	<ul style="list-style-type: none"> <li>Use words precisely, including imaginative vocabulary, to communicate ideas.</li> </ul>	<ul style="list-style-type: none"> <li>Use the techniques that authors use to create characters, settings and plots.</li> <li>Create vivid images by using alliteration, similes, metaphors and personification.</li> <li>Interweave descriptions of characters, settings and atmosphere with dialogue.</li> </ul>



# To listen carefully and understand

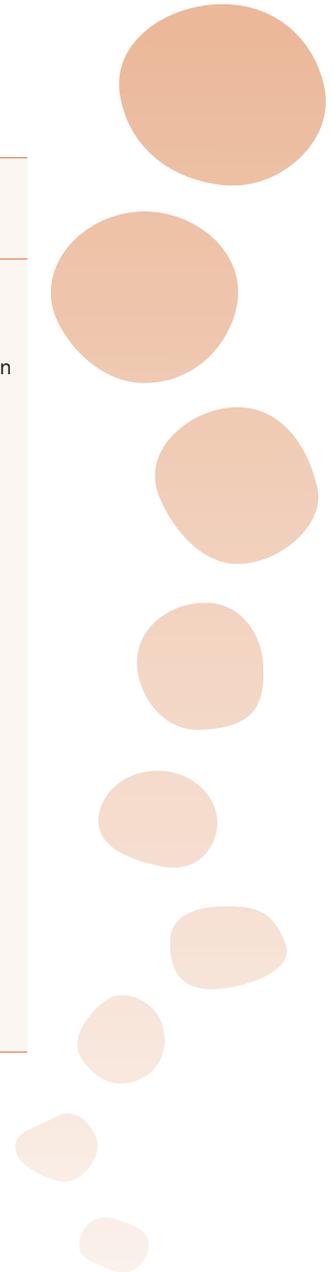
Pebble 1	Pebble 2	Pebble 3	Milestone 1
<ul style="list-style-type: none"> <li>. Distinguish one sound from another.</li> </ul>	<ul style="list-style-type: none"> <li>. Answer questions about a story.</li> <li>. Follow two unrelated instructions.</li> </ul>	<ul style="list-style-type: none"> <li>. Answer 'who', 'what', 'where' 'when', 'how' and 'why' questions.</li> </ul>	<ul style="list-style-type: none"> <li>. Sift information and focus on the important points.</li> <li>. Seek clarification when a message is not clear.</li> <li>. Understand instructions with more than one point.</li> </ul>

Pebble 4	Pebble 5	Pebble 6	Milestone 2
<ul style="list-style-type: none"> <li>. Demonstrate an awareness of rhythm and rhyme.</li> <li>. Consider the point of view of others.</li> <li>. Sit or stand in a manner that suggests interest.</li> </ul>	<ul style="list-style-type: none"> <li>. Respond to the questions of others.</li> <li>. Ask questions to help clarify key points.</li> <li>. Show awareness of the various points of view expressed.</li> </ul>	<ul style="list-style-type: none"> <li>. Listen to a sustained discussion.</li> <li>. Respect the points of view of others.</li> <li>. Use body language to encourage a speaker.</li> <li>. Demonstrate awareness of how intonation affects meaning.</li> </ul>	<ul style="list-style-type: none"> <li>. Engage in discussions, making relevant points.</li> <li>. Ask for specific additional information to clarify.</li> <li>. Understand the meaning of some phrases beyond the literal interpretation.</li> </ul>



## To speak with clarity

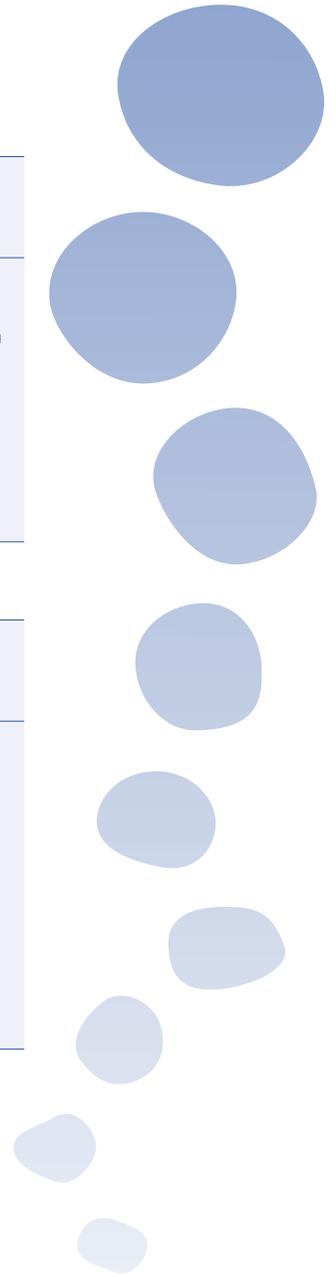
Pebble 7	Pebble 8	Pebble 9	Milestone 3
<ul style="list-style-type: none"> <li>Sustain the attention of listeners by using expression.</li> </ul>	<ul style="list-style-type: none"> <li>Engage the interest of the listener through a variety of vocabulary and expression.</li> </ul>	<ul style="list-style-type: none"> <li>Maintain and develop talk purposefully in a range of contexts.</li> <li>Demonstrate some awareness of the differences between written and spoken English.</li> </ul>	<ul style="list-style-type: none"> <li>Vary the length and structure of sentences.</li> <li>Ask questions and make suggestions to take an active part in discussions.</li> <li>Comment on the grammatical structure of a range of spoken and written accounts.</li> </ul>



# To know and use numbers - Counting

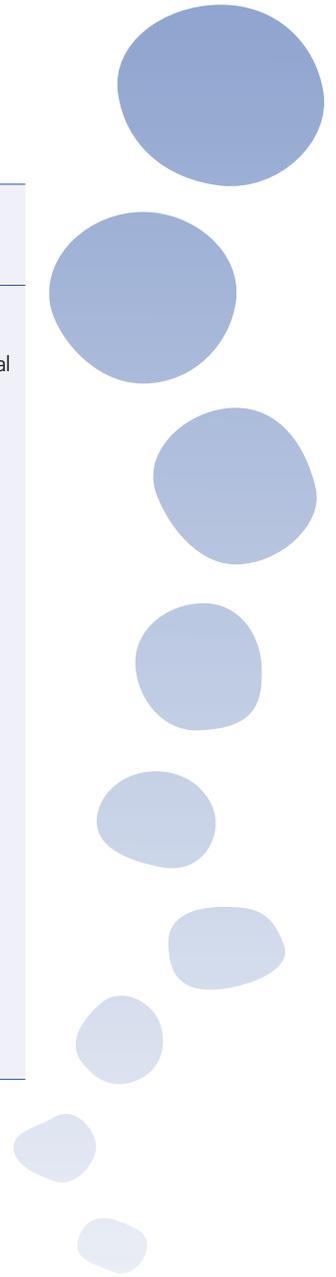
Pebble 4	Pebble 5	Pebble 6	Milestone 2
<ul style="list-style-type: none"> <li>Count in multiples of 3 and 6.</li> </ul>	<ul style="list-style-type: none"> <li>Count in multiples of 4 and 8.</li> <li>Find 10 more or less than a given number.</li> </ul>	<ul style="list-style-type: none"> <li>Count in multiples of 7 and 9.</li> <li>Find 100 more or less than a given number.</li> </ul>	<ul style="list-style-type: none"> <li>Count in multiples of 2 to 9, 25, 50, 100 and 1,000.</li> <li>Find 1000 more or less than a given number.</li> <li>Count backwards through zero to include negative numbers.</li> </ul>

Pebble 7	Pebble 8	Pebble 9	Milestone 3
<ul style="list-style-type: none"> <li>Read numbers up to 100,000.</li> </ul>	<ul style="list-style-type: none"> <li>Read numbers up to 1,000,000.</li> </ul>	<ul style="list-style-type: none"> <li>Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000.</li> </ul>	<ul style="list-style-type: none"> <li>Read numbers up to 10,000,000.</li> <li>Use negative numbers in context and calculate intervals across zero.</li> </ul>



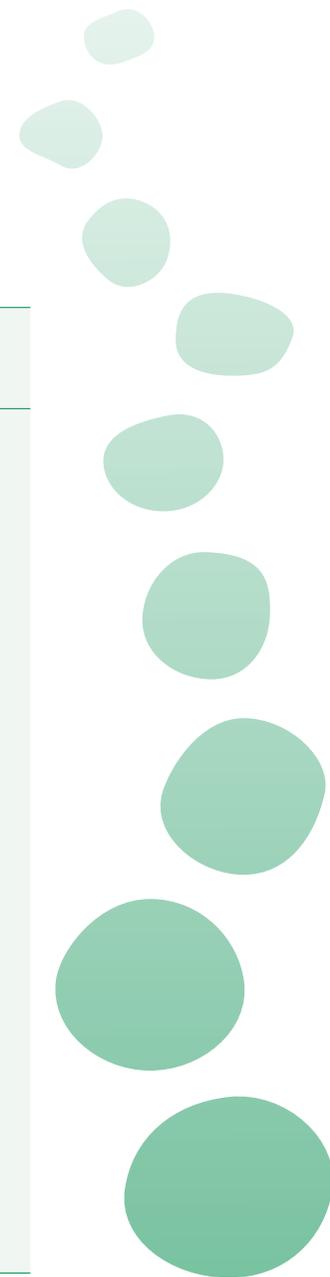
## To add and subtract - Complexity

Pebble 1	Pebble 2	Pebble 3	Milestone 1
<ul style="list-style-type: none"> <li>Follow the sequence of pictures or numbers as indicated by an adult during rhymes and songs.</li> </ul>	<ul style="list-style-type: none"> <li>Compare two given numbers of objects, understanding which is more and which is less.</li> </ul>	<ul style="list-style-type: none"> <li>Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs.</li> </ul>	<ul style="list-style-type: none"> <li>Solve one-step problems with addition and subtraction:</li> <li>Using concrete objects and pictorial representations including those involving numbers, quantities and measures;</li> <li>Using the addition (+), subtraction (-) and equals (=) signs;</li> <li>Applying increasing knowledge of mental and written methods.</li> </ul>



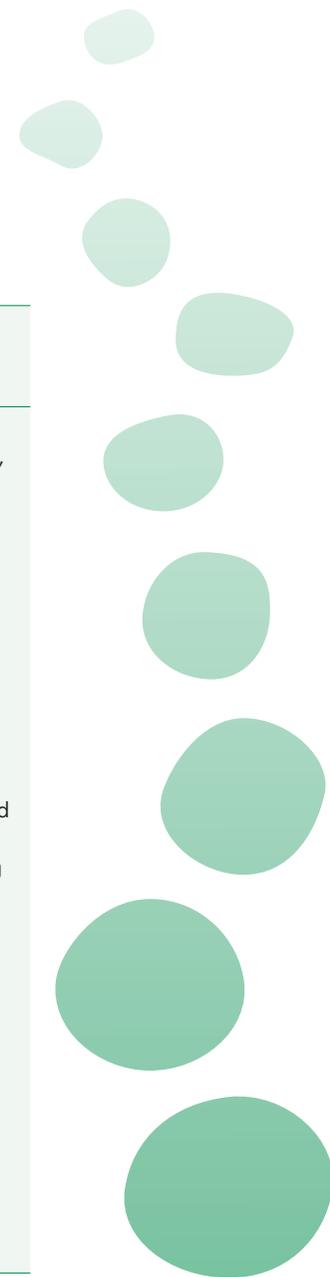
# Working scientifically

Pebble 1	Pebble 2	Pebble 3	Milestone 1
<ul style="list-style-type: none"> <li>. Demonstrate understanding of objects, materials and events [e.g. holding shaker closer to ear, smelling a flower].</li> <li>. Participate in shared activities with less support and sustain concentration for more than 2 minutes.</li> <li>. Remember learned responses over more extended periods [e.g. anticipate daily routine, i.e. snack time].</li> </ul>	<ul style="list-style-type: none"> <li>. Describe characteristics of objects and events [e.g. 'It's big', 'It's hard', 'It's shiny'].</li> <li>. Sort by a given criterion; [e.g. 'Show me the red things'].</li> <li>. Communicate observations through drawings, which can be recognised [e.g. a plant with leaves, coloured green].</li> <li>. Respond to reminders about short sequences; [e.g. when asked 'What did the cat do?', Can respond to say that 'It meowed', or 'It ran away'].</li> </ul>	<ul style="list-style-type: none"> <li>. Decide how to sort and group objects, materials and living things.</li> <li>. Gather and record data to help in answering questions.</li> <li>. Ask basic relevant scientific questions.</li> <li>. Observe closely, using simple equipment and use observations to suggest answers to simple questions.</li> </ul>	<ul style="list-style-type: none"> <li>. Ask simple questions.</li> <li>. Observe closely, using simple equipment.</li> <li>. Perform simple tests.</li> <li>. Identify and classify.</li> <li>. Use observations and ideas to suggest answers to questions.</li> <li>. Gather and record data to help in answering questions.</li> </ul>



# Chemistry - To investigate materials

Pebble 4	Pebble 5	Pebble 6	Milestone 2
<ul style="list-style-type: none"> <li>. Explain why a material is suitable or unsuitable for a particular purpose [e.g. explain that a chocolate kettle is no good because it would melt].</li> <li>. Sort a collection of materials in two ways and describe the ways in which it was sorted [e.g. by hardness, by strength].</li> </ul>	<ul style="list-style-type: none"> <li>. Classify changes as reversible and irreversible [e.g. complete a table of simple changes in the kitchen: making toast, melting butter, making chocolate drops, making coffee].</li> <li>. Recognise some common conductors and insulators, and associate metals as good conductors.</li> </ul>	<ul style="list-style-type: none"> <li>. Use knowledge about separation techniques and reversible and irreversible changes to make predictions about whether other simple changes are reversible or not.</li> <li>. Group materials according to whether they are solids, liquids or gases.</li> <li>. Describe differences between solids, liquids and gases in terms of their properties.</li> </ul>	<ul style="list-style-type: none"> <li>. Compare and group together different kinds of rocks on the basis of their simple, physical properties.</li> <li>. Relate the simple physical properties of some rocks to their formation (igneous or sedimentary).</li> <li>. Describe in simple terms how fossils are formed when things that have lived are trapped within sedimentary rock.</li> <li>. Compare and group materials together according to whether they are solids, liquids or gases.</li> <li>. Observe that some materials change state when they are heated or cooled, and measure the temperature at which this happens in degrees Celsius (<math>^{\circ}\text{C}</math>), building on teaching in mathematics.</li> <li>. Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.</li> </ul>



# Physics - To understand the earth's movement in space

Pebble 7	Pebble 8	Pebble 9	Milestone 3
<ul style="list-style-type: none"> <li>Explain physical phenomena in basic terms [e.g. explain why the apparent position of the sun changes over the course of a day].</li> </ul>	<ul style="list-style-type: none"> <li>Explain physical phenomena in more complex terms demonstrating a deepening understanding.</li> </ul>	<ul style="list-style-type: none"> <li>Describe the earth's rotation over the course of a day.</li> </ul>	<ul style="list-style-type: none"> <li>Describe the sun, earth and moon as approximately spherical bodies.</li> <li>Use the idea of the earth's rotation to explain day and night.</li> </ul>

