Progression in Working Scientifically

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|---|---|--|------------------------------------|-----------------------|-----------------------------------|-----------------------|---------------------|----------------------|----------------------|---------------------------|------------------------|--------------------------|--|------------------------|-------------------------|--------------------------|-------------------------|-----------------------|-----------------------|----------------------|----------------------|-----------------------|--------|--|
| | | | | | | | | | | 5 | duestions | Asking | | | | | | | | , | | | | |
| UtW The World) | have heard, expressing their thoughts and facilings (30-50mths. | 50mths, UtW The World) | happen and how things work (30- | Talk about why things | The World) | world (30-50mths, UtW | live or the natural | the place where they | world such as | aspects of their familiar | questions about | Comments and asks | them. | about the world around | make decisions and talk | observe, predict, think, | explore, problem solve, | encourage children to | activities that | indirectly through | Stage is introduced | Science at Foundation | EYFS | |
| | | | questions | answer scientific | different ways in which the might | recognise | Begin to | | around us. | the world | questions about | Ask simple | | | needed). | support may be | skills (adult | processes and | methods, | scientific | following | To use the | Year 1 | |
| | | | questions | answer scientific | which the might | recognise | Begin to | | around us. | the world | questions about | Ask simple | | | confidence. | increasing | skills with | processes and | methods, | scientific | following | To use the | Year 2 | C |
| noticing patterns, grouping and classifying, carrying | answering questions including observing changes over time, | which types of enquiry will be the | Begin to make some decisions about | around them. | about the world | Begin to raise their | | to answer them. | scientific enquiries | different types of | questions and use | Ask some relevant | The same of the sa | | | | | be needed). | (adult support may | processes and skills | scientific methods, | To use the following | Year 3 | |
| questions including observing changes | enquiry will be the best way of answering | Make some decisions about which types of | them. | 0) | questions about | | answer them. | enquiries to | scientific | different types of | questions and use | Ask some relevant | | | | needed). | support may be | skills (adult | processes and | methods, | following scientific | To use the | Year 4 | and the second s |
| Begin to select the most appropriate ways to answer | interactions more systematically. | analyse functions, relationships and | phenomena, | own questions | ideas, ask their | Begin to explore | • | of questions. | raise different kind | explore ideas and | experiences to | Use their scientific | | | | | be needed). | (adult support may | processes and skills | methods, | following scientific | To use the | Year 5 | |
| answer science questions using different types of | Select the most appropriate ways to | interactions more systematically. | pnenomena, analyse functions, | scientific | own questions about | about ideas ask their | - | questions. | different kind of | ideas and raise | experiences to explore | Use their scientific | | | | | | needed). | (adult support may be | processes and skills | scientific methods, | To use the following | Year b | |

| I am beginning to ask a simple question about the world around me. | Understand a question or instruction that has two parts, Understand 'why' questions, like: "Why do you think the caterpillar got so fat?" (30-50mths, UtW The World) Ask questions to find out more and to check they understand what has been said to them. (40-60 months) | Use a wider range of |
|--|---|----------------------|
| I can ask a few simple questions about the world around us. | | |
| I can ask a few simple questions about the world around us. | | |
| I can ask some relevant questions about the world around us. I can use some different types of scientific enquiry to answer questions. | things out using secondary sources. | comparative and |
| I can ask relevant questions about the world around us. I can use different types of scientific enquiry to answer questions. | patterns, grouping and classifying, carrying out simple comparative and fair tests, finding things out using secondary sources. | over time, |
| I am beginning to explore ideas and ask my own questions about scientific phenomena. | enquiry (including observing changes over different periods of time, noticing patterns, grouping and classifying, carrying out comparative and finding things out using a wide range of secondary sources of information.) | using different |
| I can explore ideas and ask my own questions about scientific phenomena. | periods of time, noticing patterns, grouping and classifying, carrying out comparative and fair tests and finding things out using a wide range of secondary sources of information.) | (including observing |

| noticing patterns, grouping and classifying, carrying | (including observing changes over different | | simple fair test is necessary and help | | | them. Join different materials and explore different | |
|---|---|----------------------|---|---------------------------|-----------------------------|---|-----------------|
| periods of time, | scientific enquiry | | Recognise when a | | | to use to express | |
| (including observing | questions using | practical enquiries | practical eliquilles | sources). | sources). | which materials | |
| scientific enquiry | to answer science | Set un simple | set up simple | secondary | secondary | then decide | |
| different types of | appropriate ways | Interactions. | | things out from | things out from | own ideas and | |
| questions using | plan the most | relationships and | interactions. | tests, finding | tests, finding | Develop their | |
| to answer science | Begin to select and | functions, | relationships and | comparative | comparative | months) | |
| most appropriate ways | develop over time. | their ideas about | functions, | simple | simple | make. (30- 50 | |
| Select and plan the | change and | Begin to develop | their ideas about | carrying out | carrying out | use them and what to | |
| over time. | scientific ideas | environments, | Begin to develop | grouping and classifying, | grouping and classifving. | ideas about how to | |
| change and develop | Begin to recognise | things and familiar | environments. | patterns, | patterns, | order to develop their | |
| scientific ideas | the world operates. | between living | things and familiar | time, noticing | time, noticing | materials freely, in | |
| Regin to recognise | understand how | the relationships | between living | changes over | changes over | Explore difference | |
| world operates. | help them to | phenomena and | relationships | - observing | observing | Evalore different | |
| understand now the | how these ideas | Explore everyday | phenomena and the | enquiry including | enquiry including | חווללסטר | |
| ideas nelp them to | begin to recognise | | everyday | of | of | materials indoor and | |
| recognise how these | abstract ideas and | questions | Begin to explore | (different types | (different types | Evolore natural | of enquires |
| and begin to | some more | to answer | | activities | activities | | different types |
| more abstract ideas | Begin to recognise | scientific enquiries | questions | practical | practical | (22-30110111113) | setting IIn |
| Begin to recognise | | different types of | enquiries to answer | including | including | (22-36months) | Planning and |
| | time. | including | types of scientific | enquiries, | enquiries, | explore direcent | 22 |
| time. | developed over | enquiries | | science | science | Evalore different | Enquiry |
| have developed over | ideas have | of scientific | w | different types of | different types of | and control. | Developing |
| Talk about how ideas | Talk about how | Be given a range | Be given a range of | Experience | Experience | Develop manipulation | |
| Year 6 | Year 5 | Year 4 | Year 3 | Year 2 | Year 1 | EYFS | |
| | | | | questions. | questions. | , | |
| - | questions. | question. | question. | answer | enquiry to | | |
| answer questions. | to answer | to answer my | on eliquity is pest to | airrerent types of | different types of | world around me. | , |
| scientific enquiry to | of scientific enquiry | of anguiry is hast | aeciae wnich type | use some | use some | 1D | |
| different types of | plan different types | dacida which two | I dill beginning to | I can begin to | I can begin to | l am exploring and | |

| things work and | explain how | and activities | organise thinking | problems and | workout | Use talk to help | connectives. | range of | another using a | or action to | Connect one idea | formed sentences. | and thoughts in well- | Articulate their ideas | is suggested to them. | cnosen, or one willcii | chore or one which | a goal they have | helps them to achieve | when needed. Inis | TO CALL COLUMN TO THE CALL CALL CALL CALL CALL CALL CALL CAL | resources, with help | activities and | Select and use | make. (30-50 months) | use them and what to | | ideas about how to | order to develop their | materials treely, in | Explore dilleteric | monuis) | rextures. (50-50 | +0v+11rec /20_50 |
|-----------------|-------------|----------------|-------------------|--------------|---------|------------------|--------------|----------|-----------------|--------------|------------------|---|-----------------------|------------------------|-----------------------|------------------------|--------------------|------------------|-----------------------|--------------------|--|----------------------|----------------------|-------------------|----------------------|----------------------|--------------------|--------------------|------------------------|----------------------|-----------------------|-------------------------|------------------------|----------------------|
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | itup | to decide how to set |
| | | | | | | | | | | | | | ε | | why | he controlled and | variables need to | explain which | and fair tests and | set up comparative | when and how to | Begin to recognise | | information.) | sources of | of secondary | using a Wide range | finding things out | and fair tests and | out comparative | classifying, carrying | grouping and | noticing patterns, | periods of time, |
| 1.00 | | | | | | | | | | | | *************************************** | | | | , | | | | | why | to be controlled and | which variables need | tests and explain | comparative and fair | how to set up | Recognise when and | | information.) | sources of | range of secondary | things out using a wide | fair tests and finding | out comparative and |

| test | | , |
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| materials, indoors and outside (22-36months) Explore and respond to different natural phenomena in their setting and on trips. Make connections between the features of their families. Notice differences between people. | EYFS | why they might happen. Return to and build on their previous learning, refining ideas and developing their ability to represent them. (40-60 months) I can explore the world around me. |
| tests with support. To begin to discuss my ideas about how to find things out. To begin to say what happened in my investigation. | Year 1 | I can begin to use some different types of enquiry to answer questions. |
| tests. To discuss my ideas about how to find things out. To say what happened in my investigation. | Year 2 | I can begin to use some different types of enquiry to answer questions. |
| simple practical enquiries, comparative and fair tests Begin to recognise when a simple fair test is necessary and help to decide how to set it up. | Year 3 | l am beginning to decide which type of enquiry is best to answer my question. |
| practical enquiries, comparative and fair tests. Recognise when a simple fair test is necessary and help to decide how to set it up | Year 4 | I am beginning to decide which type of enquiry is best to answer my question. |
| plan the most appropriate ways to answer science questions using different types of scientific enquiry (including observing changes over different periods of time, noticing patterns, grouping and | Regin to select and | I am beginning to plan different types of scientific enquiry to answer questions. I am beginning to decide which variables to control. |
| most appropriate ways to answer science questions using different types of scientific enquiry (including observing changes over different periods of time, noticing patterns, grouping and classifying, carrying out comparative and | Select and plan the | I can plan different types of scientific enquiry to answer questions. I can decide which variables to control. |

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| Outside | hear and feel whilst | Describe what they see, | months) | animal. (30- 50 | cycle of a plant and an | features of the life | Understand the key | 50 months) | for growing plants. (30- | Plant seeds and care | | IJTW) | work (30-50 months | Explore how things | | Olltside. | materials, indoors and | Explore natural | different properties. | Explore materials with | have an effect. | Repeat actions that | 35 months OTVV | natural materials (30- | hands on exploration of | Use all their senses in | (22-36 months UTW) | different properties | Explore material with | | |
|--|----------------------|-------------------------|---------|-----------------|---|----------------------|--------------------|------------|--------------------------|----------------------|------------|-----------------|--------------------|--------------------|-----------------|----------------------|------------------------|-------------------|-----------------------|------------------------|--------------------|---------------------|-----------------|------------------------|-------------------------|-------------------------|---------------------|----------------------|-----------------------|--------------------|-----|
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | variable factor. | |
| | *** | | | | *************************************** | | | | | | | in a | | | | | | | | | | | | | | | | | | factor. | |
| The second secon | | | | | | | | | fair test. | appropriate to do a | when it is | Begin to decide | give reasons. | my method and | improvements to | Begin to suggest | why. | be controlled and | variables need to | explain which | and fair tests and | set up comparative | when and how to | Begin to recognise | | information.) | sources of | of secondary | finding things out | and fair tests and | 9 |
| 1000 | | | | | | | | ומוו נבטנ. | appropriate to do a | Decide when it is | reasons. | method and give | improvements to my | Suggest | why | to be controlled and | which variables need | tests and explain | comparative and fair | how to set up | Recognise when and | | tests. | comparative and fair | set up further | make predictions to | Use test results to | | information.) | range of secondary | . (|

| Reporting, presenting and communicating data and findings | |
|---|---|
| Express ideas and feelings through making marks, and sometimes give a meaning to the marks they make. (22-36 months) | Explore the natural world around them (40-60 months) Continue, copy and create repeating patterns. (40-60 months) I am exploring the world around me. |
| Gather and record data with some adult support, to help in answering questions. Begin to record simple data. | I can begin to perform simple tests. I can begin to discuss my ideas. I can begin to say what happened in an investigation. |
| Gather and record data to help in answering questions. Record simple data. Record and communicate | I can perform simple tests. I can discuss my ideas. I can say what happened in an investigation. |
| Gather, record, and begin to classify and present data in a variety of ways to help in answering questions. Begin to record findings using simple scientific language, drawings, | I can set up some simple practical enquiries. Including comparative and fair tests. I am beginning to help decide which variables to keep the same and which to change. |
| Gather, record, classify and present data in a variety of ways to help in answering questions. Record findings using simple scientific language, | I can set up simple practical enquiries. Including comparative and fair tests. I can help decide which variables to keep the same and which to change. |
| data and results of increasing complexity using scientific diagrams and labels, classification keys, tables and bar and line graphs. | I can sometimes set up a range of comparative and fair tests. I am beginning to explain which variables need to be controlled and why. I am beginning to suggest improvements to my test, giving reasons. |
| results of increasing complexity using scientific diagrams and labels, classification keys, tables and bar and line graphs. | I can set up a range of comparative and fair tests. I can explain which variables need to be controlled and why. I can suggest improvements to my test, giving reasons. |

| I can talk about what I see. | Talk about what they see, using a wide vocabulary. Develop their communication, but may continue to have problems with irregular tenses and plurals, (30-50 months) Describe what they see, hear and feel whilst outside. (40-60 months) Continue, copy and create repeating patterns. (40-60 months) |
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| I can begin to collect simple data. I can begin to record data in a table my | Begin to record and communicate their findings in a range of ways. Can show my results in a simple table that my teacher has provided. |
| I can collect simple data. I can record data in a table provided. | their findings in a range of ways. Can show my results in a table that my teacher has provided. |
| I am beginning to collect data in a variety of ways, including labelled diagrams, bar charts and tables. | keys, bar charts and tables. Begin to report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. Begin to use notes, simple tables and standard units and help to decide how to record and analyse their data. Begin to record Begin to record results in tables and bar charts. |
| I can collect data in a variety of ways, including diagrams, bar charts and tables. I can help decide how to record | drawings, labelled diagrams, keys, bar charts and tables. Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. Use notes, simple tables and standard units and help to decide how to record and analyse their data. Can record results in tables and bar charts. |
| I am beginning to record data and results of increasing complexity using – scientific diagrams and labels, classification | Begin to report and present findings from enquiries. Begin to decide how to record data from a choice of familiar approaches. Begin to choose how best to present data. |
| I can record data and results of increasing complexity using – scientific diagrams and labels classification keys tables bar graphs | Report and present findings from enquiries. Decide how to record data from a choice of familiar approaches. Can choose how best to present data. |

| | Observing and |
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| their environment (22-36 mths, UtW) Notice patterns and arrange things in patterns.(22-36 months M) Observes the effect of exercise on their bodies (30-50mths, PD (Health and Self-care) Make comparisons between objects relating to size, length, weight and capacity. Make comparisons between objects relating to size, length, weight and capacity. Make comparisons between objects relating to size, length, weight and capacity. | Notices detailed |
| patterns and relationships Begin to use simple measurements and equipment (e.g. hand lenses, egg timers) to gather data | teacher has provided. I can begin to communicate my findings in a variety of ways. With support, begin to notice |
| patterns and relationships Use simple measurements and equipment (e.g. hand lenses, egg timers) to gather data | communicate my findings in a variety of ways. With guidance, begin to notice |
| patterns and relationships and decide what data to collect to identify them. Begin to take accurate measurements using standard units Learn how to use a range of (new) equipment, such as data loggers / thermometers appropriately | help decide how to record data. I am beginning to communicate findings using simple scientific language. Begin to look for naturally occurring |
| and relationships and decide what data to collect to identify them. Take accurate measurements using standard units Learn how to use a range of (new) equipment, such as data loggers / thermometers appropriately. | I can communicate using simple scientific language Look for naturally occurring patterns |
| their data and identify evidence that refutes or supports their ideas. Begin to choose the most appropriate equipment to make measurements with increasing precision and explain how to use it accurately. Take repeat measurements where appropriate. | graphs, line graphs I am beginning to choose how best to present data. I am beginning to communicate findings using detailed scientific language. Begin to look for different causal |
| evidence that refutes or supports their ideas. Choose the most appropriate equipment to make measurements with increasing precision and explain how to use it accurately. Take repeat measurements where appropriate. | I can choose how best to present data. I can communicate findings using detailed scientific language. Look for different causal relationships in their data and identify |

| Identifying and Classifying | | | | | | | | | , | - Andrew Control | |
|---|---|--------------------------------------|--|---------|--------------------------|-------------------|-------------|---------------------|--------------|-------------------------|----------------|
| Talk about the differences between materials and changes they notice. Notice patterns and arrange things in patterns.(22-36 months M) Make comparisons between objects relating to size, length, and consists and consists. | create repeating patterns. (40-60 months) | Compare length, weight and capacity. | Compare length, weight and capacity. (40-60 months) | months) | like 'pointy', 'spotty', | informal language | on rugs and | on clothes, designs | around them. | identifies the patterns | Talk about and |
| Begin to use simple features to compare objects, materials and living things and, with help, decide how to sort and group them (identifying and classifying) | | | | | | - | | | | | |
| Use simple features to compare objects, materials and living things and, with help, decide how to sort and group them (identifying and classifying) | | | | | | | | | | ance. | |
| Begin to talk about criteria for grouping, sorting and classifying; and use simple keys Begin to identify differences, similarities or changes related to | | | | | | | | | | | |
| talk about criteria for grouping, sorting and classifying; and use simple keys ldentify differences, similarities or changes related to | v6g | | | | | | | | | | |
| Begin to use and develop keys and other information records to identify, classify and describe living things and materials. Begin to identify patterns that might be found in the | | | | | | | | | | | |
| keys and develop keys and other information records to identify, classify and describe living things and materials. Identify patterns that might be found in the natural environment. | - | | | | | | | | | | |

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| outside. Look closely at similarities, differences, patterns and change (40-60mths UtW The World) | months) Recognise some environments that are different to the one in which they live. Describe what they see, hear and feel whilst | Compare length, weight and capacity. Continue, copy and create repeating | on rugs and wallpaper. Use informal language like 'pointy', 'spotty', 'blobs' etc. (30-50 months) | weight and capacity. Talk about and identifies the patterns around them. For example: stripes on clothes, designs | Make comparisons between objects relating to size, length, |
| | | s and living things and, with help, decide how to sort and group them. | describe. To begin to use simple features to compare objects, material | some support. To begin to observe and identify, compare and | Identify and classify with |
| | | to sort and group them. | Use simple features to compare objects, materials and living things and, with help, decide how | Observe and identify, compare and describe. | Identify and classify. |
| | | | Begin to compare and group according to behaviour or properties, based on testing. | Begin to talk about criteria for grouping, sorting and classifying and use simple keys. | simple scientific ideas and processes. |
| | | testing | use simple keys. Compare and group according to behaviour or properties, based on | Talk about criteria for grouping, sorting and classifying and | simple scientific ideas and processes. |
| | | | | · | natural environment. |
| | | | | | |

| | | Gathering and recording data | | | | | | |
|--|---|---|---|---|--|---|---|--|
| Compare sizes, weights etc. using gesture and language - 'bigger/ little/smaller', | different properties. Explore natural materials, indoors and outside. | Repeat actions that have an effect. Explore materials with | | | | | | I can compare objects. |
| changes over time. | closely using simple equipment with help, observe | Begin to record simple data. Begin to observe | | | and living things. | sort and group a range of objects, | living things. I can begin to compare, | I can begin to identify a variety of objects, materials and |
| ime. | equipment with help, observe changes over | Record simple data. Observe closely | | | | materials and living things | I can compare, sort and group a range of objects, | I can identity a variety of objects, materials and living things. |
| standard units, drawings, labelled diagrams, keys and help to | measurements in a variety of ways: notes, bar charts | Begin to collect and record data from their own | sorting and can classify using simple keys. | I am beginning to discuss criteria for grouping and | changes related to simple scientific phenomena. | phenomena. I am beginning to identify simple | or behaviour of living things, materials and other | talk about and identify differences and similarities in the properties |
| standard units, drawings, labelled diagrams, keys and help to | measurements in a variety of ways: notes, bar charts and tables. | Collect and record data from their own observations and | ∘i₁ | | | | | |
| scientific diagrams and | complexity from a choice of familiar approaches: | Begin to decide how to record data and results of increasing | related to scientific phenomena. | describe. I am beginning to | keys and other information records to classify and | I am beginning to develop my own | things, materials and other scientific phenomena. | use keys and other information records to classify and |
| keys, tables, scatter graphs, bar and line graphs. | familiar approaches: scientific diagrams and labels, classification | Decide how to record data and results of increasing complexity from a choice of | | phenomena. | I can identify changes related to scientific | information records to classify and describe. | phenomena. I can develop my own keys and other | other information records to classify and describe living things, materials and other scientific |

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| analyse this data Begin to make systematic and careful observations Help to make decisions about what observations to make, how long to make them for and the type of simple equipment that might be used | analyse this data Begin to make Systematic and careful observations Help to make decisions about what observations to make, how long to make, how long to make them for and the type of simple equipment that might be used Albut now to analyse this data. Make systematic and observations help to make decisions about what observations to make, how long to make, how long to make them for and the type of simple equipment that might be used | environments that are | Recognise some | months | natterns (40-60 | create repeating | Continue, copy and | weight and capacity. | Compare length, | months) | 'blobs' etc. (30-50 | like 'pointy', 'spotty', | informal language | wallpaper. Use | on rugs and | on clothes, designs | For example: stripes | around them. | identifies the patterns | Talk about and | weight and capacity. | relating to size, length, | between objects | Make comparisons | weight and capacity. | relating to size, length, | between objects | Make comparisons | months M) | patterns.(22-36 | arrange things in | Notice patterns and | 'heavy' (22-36 months) |
|--|---|--|----------------|--------|-----------------|------------------|--------------------|----------------------|-----------------|---------|---------------------|--------------------------|-------------------|----------------|-------------|---------------------|----------------------|--------------|-------------------------|----------------|----------------------|---------------------------|------------------|-------------------|----------------------|---------------------------|-----------------|----------------------|--------------------|-----------------------|-------------------|-----------------------|------------------------|
| analyse this data Begin to make systematic and careful observations Help to make decisions about what observations to make, how long to make them for and the type of simple equipment that might be used | nt r | | | | | | | | | | | | 4,000 | - | | | | | | | in Rosevier | | | | | | | - | | | | | - |
| | analyse this data. Make systematic and careful observations Help to make decisions about what observations to make, how long to make them for and the type of simple equipment that might be used | and the state of t | | | | | | | | | | | | | | | | Abbarr | might be used | that | simple equipment | and the type of | to make them for | to make, how long | what observations | decisions about | Help to make | careful observations | systematic and | Begin to make | | analyse this data | about now to |
| graphs, bar and line graphs. Begin to make their own decisions about what observations to make, what measurements to use and how long to make them for | | | | | | | | | | | | | | | | | | | | | | | | | | | | | נס ווומאר יווריווי | to use allu llow long | what measurements | observations to make, | |

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|---|--|-------------------------------------|---|---|---|--|------------------------------|--|-----------------------------|----------------------|-------------------------|----------------------------|
| | | | | | _ accordance — add | Research | | ` | | | , | |
| Understand 'why' questions, like: "Why do you think the caterpillar got so fat?" (30-50mths, UtW The World) | World) Respond to what they have heard, expressing their thoughts and feelings. (30-50mths, utw The World) | how things work (30-50mths, UtW The | The World) Talk about why things happen and | live or the natural world (30-50mths, UtW | aspects of their familiar world such as | Comments and asks questions about | (40-60mths UtW The World) | similarities, differences, patterns and change | outside. Look closely at | hear and feel whilst | Describe what they see, | מווופרפות נס נוופ סוופ ווו |
| | | help · | information to help me from books and | To begin to find | secondary sources to find | To begin to use simple | | - | | | | |
| | | | books and computers with | Can find information to | answers. | Use simple secondary | | | | | | |
| | investigations. | through practical | questions that cannot be answered | sources might help to answer | and how secondary | recognise when | | | | | | |
| loggers / thermometers | | ÷g | | | | | | | | | | |
| | | | | ideas. | most useful to research their | which secondary | Dogis to recognice | | | | | |
| | | | | | research their ideas. | secondary sources will be most useful to | Recognise Which | | | | | |

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| | | | Conclusions | • |
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| Be able to express a | their autonomy.(22- 36 months PSE) | They also try new things and start establishing | Express preferences and decisions. | world around them. Ask questions to find out more and to check they understand what has been said to them. (40-60 months) I can explore the world around me. |
| found it out. | Begin to talk about what they have found out and how they | their findings in a range of ways and begin to use simple scientific language. | With support, record and communicate | I can begin to find information to help me from books, computers and other familiar sources. |
| out and how they found it out. | language. Talk about what they have found | their findings in a range of ways and begin to use simple scientific | With some support, record and | I can find information to help me from books, computers and other familiar sources. |
| scientific language to discuss their ideas | | for new values, suggest improvements and raise further | I am beginning to use results to draw simple conclusions, | I can begin to decide when research will help in my enquiry. I am beginning to carry out simple research on my own. |
| language to discuss their ideas and communicate their findings in | Use relevant simple scientific | for new values, suggest improvements and raise further | Using results to draw simple conclusions, | |
| other presentations. | results, in oral and written forms such as displays and | including conclusions, causal conclusions, causal relationships and explanations of and degree of trust in | Am beginning to report and present findings from enquiries. | I am beginning to recognise which secondary source will be most useful to my research. I can begin to carry out research independently. |
| Identify scientific evidence that has | displays and other presentations. | causal relationships and explanations of and degree of trust in results, in oral and written forms such as | Reporting and presenting findings from enquiries, including conclusions, | I can recognise which secondary source will be most useful to my research. I can carry out research independently. |

or a friend, using words as well as actions. disagree with an adult differences between Talk about the months) they notice. (30-50 materials and changes

debate when they

To begin

hear and feel whilst Describe what they see,

 Understand the world around them. effect of changing different to the one in environments that are Recognise some seasons on the natural a range of connectives. action to another using perspectives of others. which they live. activities explain how out problems and and thoughts in well-Articulate their ideas Connect one idea or Think about the things work and why organise thinking and formed sentences. (40-60 months) they might happen. Use talk to help work

change about my surprised at the whether I was investigation. happened in my investigation. To begin to say what I would results or not. To begin to say say what

the results or

was surprised at To say whether

investigation. change about my Mould To say what

straightforward scientific evidence or to support their beginning to look to answer questions answer questions. conclusions and and differences in patterns, similarities With help, am to draw simple their data in order for changes, beginning to With support, am identify new

questions arising improving what find ways of new predictions and from the data, make conclusions and to draw simple differences in from the data, With support, they have already predictions and identify new improving what find ways of make new

appropriate for different audiences, including ways that are and communicate their findings in presentations of results and displays or explanations, oral and written conclusions

investigation. happened in my To say what

Am beginning to use

results and explanations, displays or for different conclusions including oral and

support their findings. questions or to to answer

similarities and patterns, answer questions. their data in order questions arising look for changes, scientific evidence to support or that has been used

ways that are discuss,

straightforward scientific evidence Use presentations of

With help, and explanations of causal relationships Begin to identify degree of trust in report conclusions, presentations to

arguments. refute ideas or

evidence to justify observations, use on their data and conclusions basec Begin to draw scientific their ideas, use understanding to knowledge and explain their

scientific ideas, justify their Use relevant

peen used to support

scientific language such as displays and written forms Begin to use oral communicate and and illustrations to and other arguments. or refute ideas or

and other and explanations of causal relationships report conclusions, presentations to forms such as displays Use oral and written

scientific evidence that Begin to identify degree of trust in support or refute ideas or arguments. has been used to

scientific knowledge evidence to justify and observations, use based on their data Draw conclusions explain their findings and understanding to their ideas, use

make predictions to set up further Use test results to comparatives and fair

causal relationships in Look for different

| | | | | | | | | | | | | | | | | | | | | | | | A110. | | | | | | | | | | | | | |
|--|----------------|-----------------|-----------------|-------------------|-------------------|---|-----------------|------------|---------|----------------|-----------|---------------------|-----------------|---------------|--------------------|-------------------|-------------------|------------------|---------------------|-------------------|-------------------|----------------------|-----------------|----------------|----------------------|---------------------|----------------------|------------------|-----------------------|-------------------|------------------------|-----------------------|----------------------|---------------------|--------------------|--|
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | _ | | | | | - | | | | | | | | | | | | | | | | | | | | | *** | | | | | | | |
| | _ | | | | | | | | | | | | | | | | | | | found out. | from what I have | answer questions | Am beginning to | better. | how I could make it | Am beginning to say | 22 | and effect. | out, linking cause | say what I found | Am beginning to | results. | | Am beginning to see | 00116. | |
| . Horasan Torrestation of the Control of the Contro | | | | | | | No. | | | | | | | | vie g | 1 | | | | | | | | | | | better. | could make it | could make it | Can can how I | cause and effect. | tound out, linking | | | in my results. | |
| set up further | predictions to | ופטעונט ניייייי | results to make | Begin to use test | scientific point. | מ | evidence proves | Know which | models. | Can use simple | evidence. | identify scientific | conclusions and | Begin to draw | opinion from fact. | Begin to separate | | needed. | observations are | further tests and | identify when | Use their results to | ideas. | supports their | that refutes or | identify evidence | their data and | relationships in | different causal | Begin to look for | , | fair tests. | comparatives and | up further | predictions to set | |
| | | | | | | | | | | | | | | | fair tests. | comparative and | to set up further | make predictions | Use test results to | scientific point. | evidence proves a | Know which | models. | Can use simple | scientific evidence. | and identify | Can draw conclusions | fact. | Separate opinion from | are needed. | tests and observations | identify when further | Use their results to | ideas. | or supports their | |

| | I can talk about the world around me. | • |
|--|--|-------------|
| | I can begin to talk about what I have found out. I can begin to explain how I carried out my enquiry. I can begin to suggest simple changes to my enquiry. | · |
| | I can talk about what I have found out. I can explain how I carried out my enquiry. I can suggest simple changes to my enquiry. | |
| I am beginning sometimes to think of cause and | to draw simple to draw simple conclusions based on the results of my enquiry. I am beginning to answer my questions using the results of my enquiry. I am beginning to use my findings to make new predictions, suggest improvements and think of new questions. | |
| | simple conclusions based on the results of my enquiry. I can answer my questions using the results of my enquiry. I can use my findings to make new predictions suggest improvements and think of new questions. I can begin to think of cause and effect in my explanations. | |
| | I am beginning to come to scientific, conclusions using the results of an enquiry to justify my ideas. I am beginning to explain my conclusion using scientific knowledge and understanding. I am beginning to distinguish opinion and facts. I am beginning to use my findings to make predictions and set up further enquiries. | fair tests. |
| | I can come to a scientific, conclusions using the results of an enquiry to justify my ideas. I can explain my conclusion using scientific knowledge and understanding. I can distinguish opinion and facts. I can use my findings to make predictions and set up further enquiries I can begin to use abstract models to explain my ideas. | |

| | | | | | | Use new vocabulary in | |
|--------------------------|---------------------|---------------------|-----------------|----------------|-----------------|-----------------------|------------|
| | generalisation. | | | | | (40-60 months) | |
| | word | | | | | through the day. | |
| | prediction and -er | | | | | Use new vocabulary | |
| | support | | | | | Learn new vocabulary. | |
| | such as trend, | | | | | | |
| | ase conventions | | | | | months) | |
| | use conventions | | | | | vocabulary. (30-50 | |
| | Am beginning to | | | | | Use a wider range of | |
| | | | language. | | | vocabulary. | 7,74 |
| | vocabulary. | | and superlative | | | see, using a wide | |
| | range of scientific | | comparative | | | Talk about what they | |
| | confidently use a | rb g | pegiii to use | | | vocabulary. | |
| | Am beginning to | | D > 2:5 +> 1:0 | | ** | stories, learning new | |
| | | language | 200 | | | conversations about | |
| | ideas. | allu superiative | language | | | Engage in extended | |
| | justify scientific | and superlative | scientific | erc | | vocabulary. | |
| | communicate and | lleo comparative | relevant | bigger, taster | | Use a wider range of | |
| | to discuss, | ldi)gudge. | Begin to use | | support. | | |
| | and illustrations | Scientific | | language | language with | 36 months) | |
| | scientific language | cientific | Out. | comparative | Use comparative | movements. (22- | |
| | use relevant | lise rejevant | 2 | 030 | • | movements /22- | |
| | Am beginning to | | they have found | se | 3 | speech and lip | |
| | | out. | about what | | words | to copy adult | |
| | correctly. | they have found | ומנפו, שוונכ | | some science | and activities. Iry | |
| V CCC CCC Y | vucabulal y | write about what | lotor write | words. | Begin to use | (Simpopolis) | |
| vocabulary | vocabulary | rain and, racer, | to talk and, | some science | | (+brough babbling) | |
| use the correct science | scientific | talk and later | language | language and | language | in conversations | |
| simple processes. Can | pronounce | + 0 | some scientific | scienuiic | scientific | do, taking 'turns' | |
| when describing | read, spell and | scientific language | Dagill to use | Use simple | Use some simple | Copy what adults | Vocabulary |
| Can use scientific ideas | Am beginning to | Use some | Regin to 1150 | I to simple | - | | |
| | loeas. | | | | | | |
| | | | | | | | |
| | to explain mv | | explanations. | | | | |
| | abstract models | | 550 | | | | |
| | - Ca:- 500::: 60 # | | effect in my | | | | |

| | I am learning new words. | selected non-fiction to develop a deep familiarity with new knowledge and vocabulary. Use new vocabulary in different contexts (40-60 months) |
|---|---|---|
| | I can begin to use simple scientific language. I can begin to describe what I see eg something is long. I can begin to compare eg something is shorter. | |
| | I can use simple scientific language. I can describe what I see. I can compare eg something is longer or shorter. | |
| shortest. I can begin to describe cause and effect. | to use some scientific language in my work. I am beginning to describe my observations and my findings. I am beginning to use comparative and superlative descriptions eg longer / shorter than, longest / | |
| | can use comparative and superlative descriptions eg longer / shorter than, longest / shortest. I can begin to describe cause and effect. | |
| I am beginning to use scientific conventions eg trends, rogue result, support prediction. | I am beginning to read, spell and pronounce scientific vocabulary correctly. I am beginning to confidently use the correct scientific language when appropriate. I am beginning to explain my ideas with scientific reasons. | when describing simple processes. Am beginning to use the correct science vocabulary |
| | I can read, spell and pronounce scientific vocabulary correctly. I can confidently use the correct scientific language when appropriate. I can explain my ideas with scientific reasons. I can use scientific conventions eg trends, rogue result, support prediction. | |

| | | | | | | Understanding |
|--|---|---|--|---|---|--|
| | I can respond to what I see or hear. | expressing their thoughts and feelings. | (30-50 months) Respond to what they have heard, | Talk about what they see, using a wide vocabulary. | disagree with an adult or a friend, using words as well as actions. (30-50 | Be able to express a point of view and to |
| I can say how science can be dangerous eg electricity can give you a shock. | I can say how science helps us in our daily lives. | | | understand science can sometimes be dangerous. | in our daily lives eg. torches and lights help us see hen it is dark. Am beginning to | Can begin to talk about how science helps us |
| I can say how science can be dangerous eg electricity can give you a shock. | I can say how science helps us in our daily lives. | | | understand science can sometimes be dangerous. | daily lives eg. torches and lights help us see hen it is dark. Am beginning to | how science |
| better eg computers in schools, hospitals etc I can begin to understand risk in science | I am beginning to know which things in science have made our lives | | | | our lives better. Can begin to understand risk in science | which things in science have made |
| computers in schools, hospitals etc I understand there is some risk in science | I know some things in science which have made our lives better eg | | | | lives better. Can understand there is some risk in science. | things in science have made our |
| I am beginning to say which parts of our lives rely on science. I am beginning to explain the positive and negative effects of scientific developments. | I am beginning to see how science is useful in lots of different ways. | science. | Am beginning to say which parts of our lives rely on | development. Am beginning to see how science is useful in everyday life. | have changed over time. Am beginning to explain the positive and negative effects of scientific | talk about how scientific ideas |
| of our lives rely on science. I can explain the positive and negative effects of scientific developments. | I can see how science is useful in lots of different ways. | | | Can see how science is useful in everyday life. Can say which parts of our lives rely on science. | Can explain the positive and negative effects of scientific development. | scientific ideas have changed over time. |
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