Meta-skills Progression Framework



Meta-skills are innate, timeless, higher-order skills that create adaptive learners and promote success in whatever context the future brings. From birth, children use their meta-skills as they test and explore the world around them, and it is these meta-skills that act as a key to unlock the development of other transferable and technical skills. Therefore, it is important that as children and young people progress through their education, practitioners make meta-skills explicitly visible and create opportunities for learners to recognise, understand and explore their meta-skills development.

The Skills Development Scotland meta-skills progression framework has been developed in collaboration with partners and practitioners from across Scotland and aims to help with identifying and understanding what meta-skills look like in the classroom. The framework builds on the 'Skills 4.0 – A Skills Model to Drive Scotland's Future' paper and illustrates examples of meta-skills across Curriculum for Excellence levels, from early years through to senior phase.



Points to consider when using the meta-skills progression framework:

- the framework is not mandatory and is provided to support practitioners to reflect and develop their teaching practice in developing metaskills in the classroom
- the framework has not been developed for use as a tool by learners although this is at the discretion of practitioners as they feel appropriate, in their school
- the examples given are not exhaustive and are provided as a suggested starting point to support understanding
- practitioners should explore the examples in the framework and consider how these relate to learner's experiences in their own context or subject.

Focusing

Focusing is the ability to be able to manage cognitive load by filtering and sorting information in order to maintain a sense of focus in an age of information overload and constant change.

Focusing can include the following:

- Sorting: The ability to sort information into categories and to understand the relationship between information
- Attention: The ability to focus on the present and deflect/avoid distractions
- Filtering: The ability to filter out non-essential information and focus on the essential problem at hand



Learners show focusing at Early Level by:	Learners show focusing at First Level by:	Learners show focusing at Second Level by:	Learners show focusing at Third/Fourth Level by:	Learners show focusing in Senior Phase by:
 displaying continuous, interest and involvement in a task over a period of time identifying objects and events as the same or different, and sorting objects into groups accepting changes in their environment in order to be able to focus on a task. 	 concentrating on the activity at hand and avoiding distractions to complete it being systematic and working through the stages of a task and explaining the reason for their choices understanding any changes in their environment required to support their focus on a task. 	 asking questions to clarify tasks, remaining focused to plan and set goals with some support to complete an activity/task organising their thinking and focusing on an activity to avoid distractions drawing from various sources of information, sorting through the information to focus on what is essential suggesting changes to their environment to support their ability to focus on an activity. 	 asking questions to clarify tasks and communicating the information they have researched organising their thinking and demonstrating structure to present ideas in a logical order, avoiding and deflecting distractions identifying essential information, drawing conclusions, and summarising their findings selecting the most appropriate environment that allows focus to be given to the task in hand. 	 asking questions to understand the task, and helping others with their understanding or involvement to keep the activity on track focusing on the task at hand and confidently and sensitively challenging distracting behaviour in others if necessary confidently bringing together essential information from various sources, summing up ideas, issues, findings, or conclusions and presenting them appropriately independently selecting the most appropriate environment to focus on the task in hand.

Integrity

Working with integrity ensures that we always consider what we believe to be ethical and fair. It is acting in an honest and consistent manner based on a strong sense of self and personal values.



Using integrity can include the following:

- Self-awareness: The ability to understand and manage emotions, strengths, belief systems and limitations, and the effects of these on behaviours and the way they impact on others
- Ethics: Being aware of and acting on personal values and principles
- Self-control: The ability to exercise control over your own impulses, emotions and desires

Learners show integrity at Early Level by:	Learners show integrity at First Level by:	Learners show integrity at Second Level by:	Learners show integrity at Third/Fourth Level by:	Learners show integrity in Senior Phase by:
 showing kindness to others and being sensitive to others' feelings being aware of how their actions can affect others recognising that we have similarities and differences but are all unique. 	 understanding and following rules in play and games understanding that other people may have different values and ideas to their own and learning to compromise recognising and respecting other people's feelings and emotions, and what kind of actions and events can impact on these in positive or negative way adapting their language and behaviour to suit different situations. 	 being respectful in their interactions with others and being willing to understand other people's ideas or values devising and following rules and giving an opinion as to the need for them being aware that other people's feelings and emotions may impact on the way they speak or behave and can respond sensitively participating in discussions about values and being able to demonstrate these through daily life. 	 discussing the role rules play in a democratic society and being aware of global and cultural differences being respectful during any interactions with others in a wide range of contexts, including those who may have different values and principles to their own showing sensitivity to other people's feelings or abilities and accepting changes to an approach when working in a group if appropriate demonstrating personal values in their school and daily life and being able to express an opinion as to why these are important. 	 understanding the role rules play in a democratic society, and are actively seeking to widen their understanding of global and culture differences being sensitive to other people's feelings or abilities, and making an appropriate judgement as to when they need to change their approach or work in a different way to accommodate them not only demonstrating personal values in daily life but seeking to widen their understanding of other people's values and principles.

Adapting

Adapting is the ability and interest to continue to enlarge knowledge, understanding and skills in order to remain adaptive and resilient as circumstances change.

Adapting can include the following:

- Openness: Being open to new ideas and approaches having a growth mindset
- Critical reflection: The ability to critically reflect on new knowledge and experiences in order to gain a deeper understanding, embed and extend learning
- Adaptability: Flexibility when handling the unexpected, adapting to circumstances as they arise
- Self-learning: The ability to self educate without the guidance of others
- Resilience: The ability to respond positively and constructively to constantly evolving challenges and complexity

Learners show adapting at Early Level by:	Learners show adapting at First Level by:	Learners show adapting at Second Level by:	Learners show adapting at Third/Fourth Level by:	Learners show adapting in Senior Phase by:
 asking lots of questions and being curious about the world around them recognising simple problems and talking about solutions with others being flexible and resilient when faced with novel or unexpected situations learning to work and play with others. 	 asking and answering questions to deepen understanding and adapting how to play and learn identifying and reflecting on problems and enjoying finding solutions creatively thinking of solutions to a task and developing this through use of trial and error adapting their behaviour and language to suit different situations and activities willingly taking turns and sharing co-operatively with others when working on a group task. 	 posing interesting questions and constructively challenging ideas to adapt thinking and behaviour identifying problems and researching different ways to understand and find solutions, including using online tools understanding and responding to feedback when working with their peers changing their way of working to fit with different activities and different groups reaching agreements and beginning to manage disagreements. 	 asking questions, thinking laterally and adapting behaviour to suit a range of contexts enjoying selecting texts or other relevant information regularly to inform thinking navigating a range of challenges in order to develop a deeper understanding of how to apply skills giving and responding to feedback from their peers, and being willing and able to reach agreement through compromise critically evaluating and changing their approach when working in a group, taking increasing responsibility if necessary. 	 thinking laterally, applying their understanding in a wide range of contexts, demonstrating initiative and discipline evaluating their own progress and being able to adapt their approach to overcome unexpected challenges treating others with respect and seeking effective ways to develop co-operation, including resolving conflict working with peers to devise ways to evaluate and improve their performance responding positively and influencing others when faced with unexpected change.

Initiative

Initiative is about thinking for ourselves and is the readiness to get started and act on opportunities built on a foundation of self-belief.

Using initiative can include the following:

- Courage: The ability to manage and overcome fears in order to take action
- Independent thinking: The ability to think for one's self and trust one's own judgement
- Risk-taking: Doing something that involves danger or risk in order to achieve a goal
- Decision-making: The act of making a considered choice after appropriatley using intuition and careful thought
- Self-belief: A feeling of trust in one's abilities, qualities and judgement
- Self-motivation: The ability to act without influence or encouragement from others
- Responsibility: The ability to follow through on commitments, be proactive and take responsibility
- Enterprising: Willingness to take risks, show initiative and undertake new ventures



Learners show initiative at Early Level by:	Learners show initiative at First Level by:	Learners show initiative at Second Level by:	Learners show initiative at Third/Fourth Level by:	Learners show initiative in Senior Phase by:
 beginning to plan, and enjoying completing a given task both following instructions and making their own instructions for others to follow showing confidence through expressing themselves through actions such as making marks, role play, joining games, singing or dancing with a little prompting if needed for support being confident when faced with new situations and environments with a little support. 	 breaking tasks into smaller parts in order to plan next steps persisting with and completing a task asking questions with confidence about an activity to confirm understanding of the purpose of the task developing an awareness of what they enjoy and what they find difficult. 	 evaluating and classifying information and selecting the most appropriate methods for a particular task setting their own goals in order to complete a task within a deadline evaluating what they have learned and being able to compare their approach with others in the group understanding directions and being confident in undertaking a task confidently challenging themselves when faced with the unexpected, but knowing when to ask for help. 	 planning and selecting information independently to create an action plan and complete tasks determining and setting realistic targets for self-improvement, and deadlines for completion of tasks evaluating different approaches to thinking and learning, and evaluating their progress analysing and evaluating tasks and information by listening and being confident when questioning persevering with tasks in the face of frustrations by using creativity and prior learning to find solutions. 	 showing independent thinking in planning and setting goals, and following through with actions for improvement reviewing their own learning, linking and using that information to review and propose realistic targets and deadlines confidently exploring and discussing alternatives when planning a way forward, in and out of school confidently taking responsibility when exploring new situations and supporting others to complete complex or unexpected tasks.

Communicating

Communicating is the ability to openly and honestly share information in a way that creates mutual understanding about thoughts, intentions and ideas between all parties involved.

The ability to communicate can include:

- Receiving information: Understanding and mentally processing verbal or written communication
- Listening: The ability to actively understand information provided by the speaker, and displaying interest in the topic discussed
- Giving information: Giving written or verbal communication in way that can be best understood by those receiving the communication
- Storytelling: The ability to tell stories that persuade, motivate and/or inspire as well as bringing the sharing of knowledge to life through examples and illustrations

Learners show communicating at Early Level by: • enjoying listening to and recalling stories with friends, and using their imagination to tell their own stories • expressing themselves through play and storytelling, and talking about their learning • talking about memories	Learners show communicating at First Level by: • communicating with increasing confidence in a variety of ways verbally and digitally • listening to others, sharing ideas and experiences, and showing curiosity when exploring different points of view	Learners show communicating at Second Level by: • communicating confidently in a variety of familiar and unfamiliar situations, in a range of different ways • posing interesting questions that do not have straightforward answers • using what they see and hear to form and justify opinions, and find out more	Learners show communicating at Third/Fourth Level by: • seeking out questions to explore and problems to solve by experimenting with ideas and questions • communicating confidently through different means such as verbal, written and digital resources • listening carefully and valuing other opinions and	Learners show communicating in Senior Phase by: • using appropriate and more complex language to question and explore ideas, and explain solutions to problems clearly and concisely • valuing other people's opinions and ideas, and combining these with information from different
 and experiences learning to use words to suit different purposes listening to and following directions to be part of an activity. 	 listening to and exploring other people's stories, and asking questions about the world around them adapting their language and behaviour to suit different situations asking appropriate questions about an activity to make sure they understand the purpose of the task. 	 information sharing, explaining, and justifying their own views, and beginning to use language to influence others asking more focused questions in order to understand a task and to be able to plan activity. 	ideas and using these to develop their own thinking Iistening to other points of view and reaching agreement through compromise analysing and evaluating tasks and information independently by listening and questioning.	sources to create new ideas and solutions • using effective, more complex language to explain their own views and thoughts • confidently asking questions, and exploring and discussing alternatives when planning a way forward in and out of school.

Feeling

Feeling is considering the impact on other people by being able to take a range of different thoughts, feelings and perspectives into account.



Examples of demonstrating feeling include:

- Empathy: The ability to take the perspective of others into account in order to understand their feelings and motivations
- Social conscience: A sense of responsibility and concern for wider society

Learners show feeling at Early Level by:	Learners show feeling at First Level by:	Learners show feeling at Second Level by:	Learners show feeling at Third/Fourth Level by:	Learners show feeling in Senior Phase by:
 showing kindness and being sensitive towards others being aware of how actions can affect others expressing genuine concern and responsibility for others and the wider society. 	 recognising and respecting other people's feelings and emotions showing kindness and having an understanding that their own actions have an impact on the feelings of others being aware of what kind of actions and events can impact on other people's feelings in a positive or negative way having a growing awareness of global issues and developing interests in how to help these issues at a local level. 	 showing kindness and respect in interactions with others, including those who may have different ideas or values being aware that other people's feelings and emotions may impact on the way they speak or behave and being able to respond sensitively growing aware and having an understanding of global issues, and how we can impact positively on sustainable change. 	 showing kindness and respect in interactions with others in a wide range of contexts and circumstances including those who may have different ideas or values being sensitive to other people's feelings or abilities and suggesting changes to an approach in group work if necessary developing a deeper understanding of global issues and expressing opinions in a logical way. 	 showing kindness and respect to other people in all contexts and circumstances seeking information to explore and build on their understanding and opinions of people and the world outside of their immediate environment /influences comparing different ways of working in order to accommodate other people during group work seeking information from a variety of different sources to compare and build on knowledge and understanding of complex global issues.

Collaborating

Collaborating is working with others. It is about working in coordination with others to convey information or tackle problems.

The ability to collaborate includes:

- Relationship building: The ability to identify and initiate connections and to develop and maintain them in a way that is of mutual benefit to both one's self and others
- Teamworking and collaboration: Working with others towards shared goals. Creating group synergy in pursuing collective goals
- Social perceptiveness: Being aware of others' reactions and understanding why they react as they do
- Cultural competence: Sensitivity to and awareness of different cultural settings

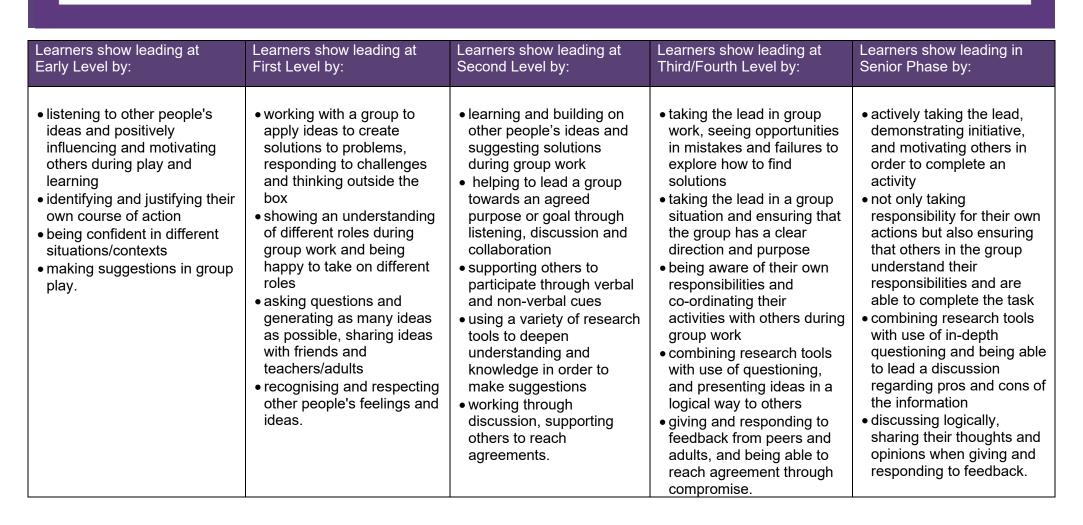
Learners show collaborating at Early Level by:	Learners show collaborating at First Level by:	Learners show collaborating at Second Level by:	Learners show collaborating at Third/Fourth Level by:	Learners show collaborating in Senior Phase by:
 engaging in creative play and working well with friends and less familiar people listening to others in a group being able to join in with others in a one-to-one situation or part of a group being aware of how their actions can affect others learning to use words to suit different purposes. 	 becoming more adept at taking turns and working within a group to complete a task listening to and valuing other's opinions and learning from shared modelled behaviour developing habits of collaborative learning recognising and respecting other people's feelings and ideas adapting their language and actions to suit different situations. 	 working within a group taking on different roles and tasks learning to understand, respond to and build on feedback from others being happy to work in a group and willing to help others with their learning showing sensitivity to other's feelings and being willing to challenge poor behaviour in others, if necessary sharing, explaining and justifying their views and beginning to use language to influence others. 	 being willing to take the lead in demonstrating learning to others giving feedback in addition to responding to feedback from peers and adults taking increasing responsibility for work assigned to teams evaluating and changing their approach in group work if necessary listening to other points of view and taking part in agreeing through compromise. 	 being able to consider an individual's qualities and skills when assigning roles and responsibilities within a team responding constructively and respectively to others managing their own emotions, demonstrating empathy and sensitivity to others comparing different ways of working to justify an approach when working in a group listening to other people's views and reasoning in order to influence an acceptable outcome.

Leading

Leading is the ability to have ownership over a task, to be able to lead others by inspiring them with a clear vision, motivating and influencing others to complete tasks.

The ability to lead can include:

- Inspiring others: The ability to energise and create a sense of direction, purpose, excitement and momentum
- Influencing: Working to gain the agreement of others to a particular course of action
- Motivating others: Encouraging others to achieve goals, accomplish tasks, and complete objectives
- Developing others: The ability to coach and constructively review the work of others to improve and advance their skills, knowledge and performance level
- Change catalyst: Having the ability to ignite change





Curiosity

Curiosity is the desire to know or learn something in order to inspire new ideas and concepts. Using research skills like observation, questioning, information-sourcing and problem recognition will support us to understand, break down and find the root cause of a problem or opportunity in order to identify alternative solutions.



The ability to be curious incorporates:

- Observation: The ability to notice behaviour or information and register it as being significant
- Questioning: The ability to ask questions in order to increase understanding about a subject or experience
- Information-sourcing: The ability to filter resources and information to find information on an issue or topic
- Problem recognition: The acknowledgement and definition of a problem

Learners show curiosity at Early Level by:	Learners show curiosity at First Level by:	Learners show curiosity at Second Level by:	Learners show curiosity at Third/Fourth Level by:	Learners show curiosity in Senior Phase by:
 showing excitement, enjoying the unexpected, the unusual and surprise in learning asking lots of questions about what they are learning observing and asking questions about the world around them using sources of information such as books, digital technologies, family and peers to find relevant information carrying out self-directed learning and recognising and resolving related problems. 	 approaching new tasks and challenges with interest and enthusiasm asking and answering questions to deepen understanding listening to and exploring other people's stories showing interest and asking questions about the wider world asking questions and generating ideas by combining information and learning using research skills to find information that increases understanding and enjoyment when learning at school and home. 	 being curious about the unfamiliar and unexpected posing relevant questions to develop their understanding actively building on their own and other's ideas and experiences to solve problems and develop understanding constructively challenging ideas that are presented independently using a range of sources of information to form and justify opinions showing an understanding of whether the source of information is reliable or not and giving reasons why. 	 formulating and experimenting to explore unfamiliar problems and new ideas and challenges choosing a blend of subjects and information that enables them to pursue their interests both in and out of school asking questions and using creativity skills to think laterally in a range of contexts listening carefully and valuing other's opinions and ideas, and using these to develop their own thinking combining research tools to increase their understanding of a subject. 	 transferring creative processes to other situations and exploring and refining multiple options asking questions and thinking laterally, in order to suggest and test multiple theories combining information from different sources to develop new ideas and solutions seeking out new methods of research and wider ranges of information sources to increase their understanding of a subject in any given context, being interested in exploring and discussing other people's opinions.

Creativity

Creativity is the ability to imagine and think of new ways of addressing problems, answering questions or expressing meaning. We should see creativity in its broadest sense, not just related to art, drama or music, but using our imagination to develop the ability to visualise solutions and to support more effective learning.



The ability to be creative can include:

- Imagination: The ability to explore ideas of things that are not in our present environment, or perhaps not even real
- Idea generation: Proficiency at thinking and coming up with solutions and responses beyond that which is routine or rule-based
- Visualising: Translating information and thought into accessible expressions, readable and recognisable images
- Maker mentality: The ability to explore through tinkering and making, to arrive at new ideas and solutions

Learners show creativity at Early Level by:	Learners show creativity at First Level by:	Learners show creativity at Second Level by:	Learners show creativity at Third/Fourth Level by:	Learners show creativity in Senior Phase by:
 expressing themselves through different types of play such as mark making, role play, making things, tinkering with objects, singing and dancing being willing to take on new challenges engaging well in creative play with friends, for pleasure and as a form of creative expression asking questions about the wider world. 	 listening and sharing ideas and experiences, and showing curiosity when approaching new tasks experimenting with and investigating real life issues creating objects/items in response to a challenge or interest using a range of resources including digital technologies working on their own, or with a group, to apply ideas to create solutions to problems and challenges by thinking outside the box creating and planning next steps of an action, identifying the when, what and how in response to a challenge. 	 posing interesting questions that do not have straightforward answers beginning to understand the value of their own judgements and the merit of their own work creating and designing solutions to a problem independently and collaboratively as part of a wider group understanding that mistakes and failures can lead to solutions to problems learning from, and building on, other people's ideas and experiences. 	 experimenting with ideas and questions thinking laterally and applying their creativity skills in a wide range of contexts experimenting with different designs and actions to make ideas real developing opportunities from mistakes and failures to create solutions and valuing the unexpected or the surprising making new connections between ideas and information both in school and out of school. 	 thinking creatively when approaching novel situations, drawing on previous experiences and testing new ideas using their skills and knowledge in a wide range of work and other contexts demonstrating initiative, persistence and resilience in order to create solutions collaborating to create solutions to problems researching productively, making good use of their skills and knowledge to make choices about learning, pathways and career options.

Sense-making

Sense-making is the ability to make sense of information, to solve complex problems, to determine the deeper meaning or significance of what is being expressed and to recognise wider themes and patterns in information or solutions.

The ability to make sense of information incorporates:

- Pattern recognition: The process of classifying information into objects or classes based on key features
- Holistic thinking: The ability to see the big picture and understand subtle nuances of complex situations
- Synthesis: The process of organising, manipulating, pruning and filtering gathered data into cohesive structures for information building
- Opportunity recognition: The ability to identify areas of opportunity for innovation
- Analysis: A systematic examination and evaluation of data or information by breaking it into its component parts to uncover their interrelationships

Learners show sense-making at Early Level by:	Learners show sense-making at First Level by:	Learners show sense-making at Second Level by:	Learners show sense-making at Third/Fourth Level by:	Learners show sense-making in Senior Phase by:
 recognising and describing visual and audio patterns and differences recognising problems and talking about solutions asking and answering questions in relation to stories, play and learning in relation to themselves, families and friends listening and understanding what is being said in the context of play, stories and real-life events identifying and naming objects or events as the same or different, and sorting objects into groups. 	 recognising patterns and anomalies and being able to make up their own patterns identifying problems and enjoying finding solutions recalling facts, opinions and information to help inform what they know and understand showing understanding by organising, summarising and recalling facts identifying similarities, making simple comparisons and connections being systematic and working through the stages in a task. 	 using creativity and knowledge of different subjects to contribute ideas identifying problems and researching different ways to find solutions including using online tools asking, researching and answering questions about the world, extending their own world map using memory strategies to deepen understanding and comprehension identifying and ordering patterns and relationships through a range of strategies such as grouping, classifying and/or comparing and contrasting examining options, sharing their opinions and justifying their answers. 	 experimenting with different ideas and questions to improve understanding selecting texts or other relevant sources of information regularly for enjoyment and interest examining different options and using reasoned argument to express opinions and justify answers evaluating the appropriateness of information or resources, showing increasing critical ability organising their thinking and demonstrating structure to present ideas in a logical order. 	 regularly seeking out texts or other relevant sources to inform thinking confidently presenting ideas or information in a way that sustains a point of view with relevant supporting evidence explaining how well a text or information source meets requirements with appropriate justification selecting and using appropriate resources to enhance their ideas and communicate effectively to an audience providing different options based on reasoned and complex judgement and being able to express opinions using relevant supporting evidence.

Critical thinking

Critical thinking is the ability to process, analyse and evaluate information to solve problems, or understand a situation and make decisions in a variety of contexts.

The ability to solve complex problems can include:

- **Deconstruction:** Breaking down a complex problem or system into smaller, more manageable parts before developing a new way of addressing the problem
- Logical thinking: The ability to identify, analyse and evaluate situations, ideas and information in order to formulate responses to problems
- Judgement: The act or process of forming an opinion after careful thought
- Computational thinking: The ability to translate vast amounts of data into abstract concepts and to understand data-based reasoning

Learners show critical thinking at Early Level by:	Learners show critical thinking at First Level by:	Learners show critical thinking at Second Level by:	Learners show critical thinking at Third/Fourth Level by:	Learners show critical thinking in Senior Phase by:
 working with a focus, asking and responding to questions to clarify what they are doing making simple predictions and seeing possibilities asking different types of questions summarising and reflecting on their learning using materials from their environment and coming up with their own ideas on how to solve problems. 	 asking focused questions to clarify tasks and what needs to be done to plan and to set goals beginning to test predictions and look for evidence being systematic and working through the stages of a task recognising the difference between why, what, where when, and how questions explaining their methods and opinions when evaluating work, and beginning to justify their choices and actions applying strategies to help solve problems in a variety of contexts including reallife, learning and play. 	 using different types of questions systematically and with purpose making and testing predictions, examining evidence and making links between possible causes and effects examining options when working through a task and weighing up the pros and cons of different approaches explaining and justifying methods, opinions and conclusions whilst understanding more than one point of view selecting the most appropriate strategy to solve a problem and complete a task. 	 explaining processes, concepts or ideas confidently, and being able to explain links between possible causes and effects identifying and raising issues, drawing conclusions and summarising their findings examining the pros and cons of a decision, predicting likely consequences and evaluating the outcomes from a range of perspectives identifying an appropriate strategy to solve complex problems in order to complete tasks. 	 explaining complex processes or concepts with relevant supporting detail and evidence and can confidently justify their reasoning presenting complex ideas or issues in an appropriate way to different audiences posing questions about the reliability of evidence and the consequences for reaching conclusions presenting rational opinions and conclusions based on a combination of their own and other's point of view identifying and evaluating complex problem solving strategies demonstrating to others their process for reaching that conclusion in a logical way.