# An Daras Multi Academy Trust
Assessing Pupil Progress – Computing (Y1)

Integrated Curriculum Scheme of Learning - 2016	
Document:	**ADMAT Assessing Pupil Progress (APP)**
National Curriculum Subjects:	**Computing**
Year Group:	**Year 1**
Agreed and Approved:	**Sept 2016**
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Related Documents and Guidance:	National Curriculum 14/15
	Dimensions Skill Ladders 14
	Computing Scheme of Learning 15
	Non-Negotiable 14
	Progression Frameworks for Computing
	Computing Policy 15
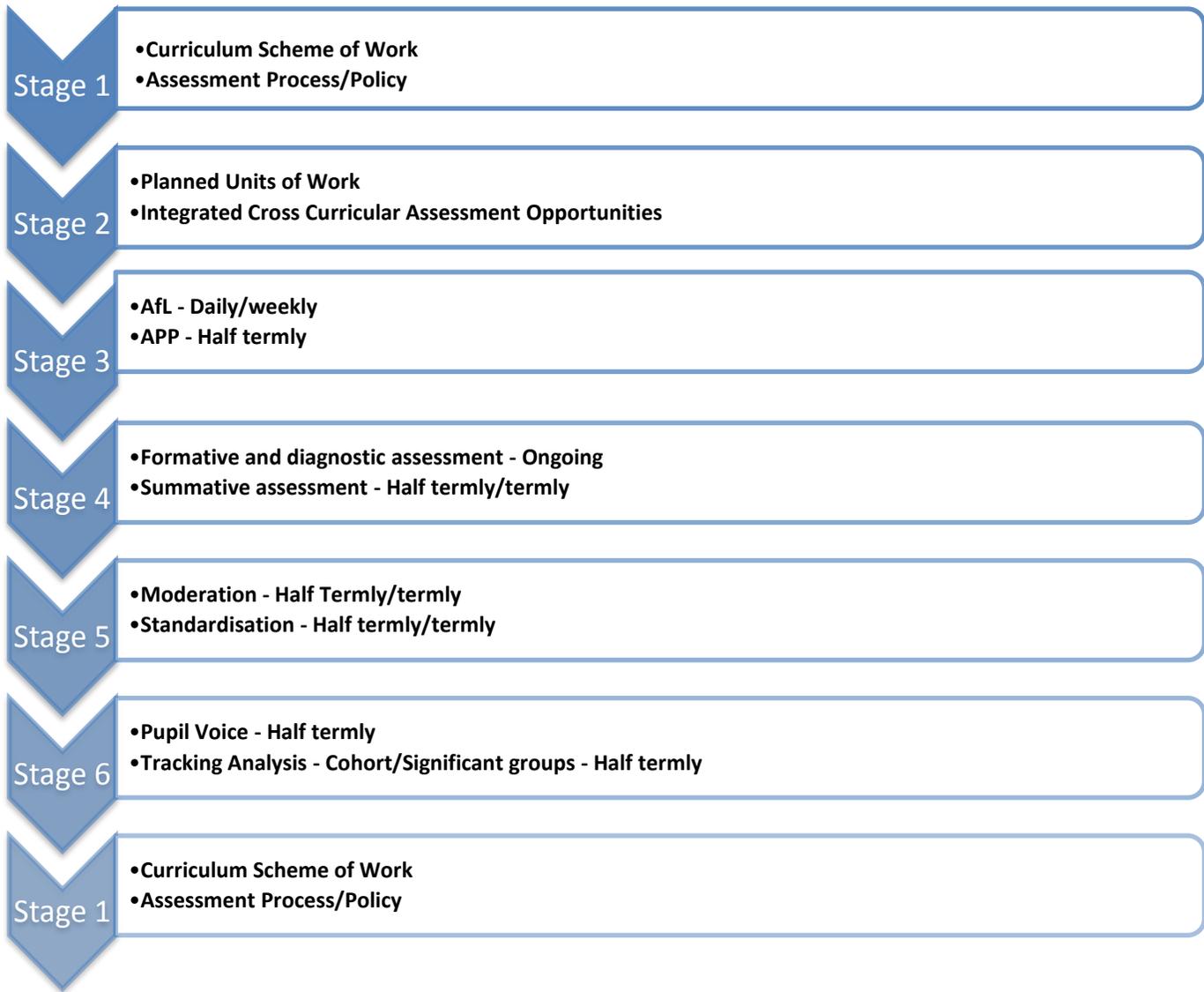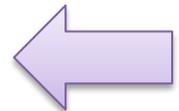
Stage		
Stage 1	•**Curriculum Scheme of Work** •**Assessment Process/Policy**	• Reviewed annually • Curriculum Policy • DfE Guidance • Pupil Outcomes
Stage 2	•**Planned Units of Work** •**Integrated Cross Curricular Assessment Opportunities**	• Reviewed Termly • Cross Curricular evidence
Stage 3	•**AfL - Daily/weekly** •**APP - Half termly**	• Marking • Rich Evidence • Standardisation Tasks
Stage 4	•**Formative and diagnostic assessment - Ongoing** •**Summative assessment - Half termly/termly**	• Analysis • I Track • 85% on track ARE
Stage 5	•**Moderation - Half Termly/termly** •**Standardisation - Half termly/termly**	• Within school • Across MAT • Practical exemplars
Stage 6	•**Pupil Voice - Half termly** •**Tracking Analysis - Cohort/Significant groups - Half termly**	• Within school • Across MAT • Practical Exemplar • Feeds into planned units of work
Stage 1	•**Curriculum Scheme of Work** •**Assessment Process/Policy**	• Reviewed annually • Curriculum Policy • DfE Guidance • Pupil Outcomes
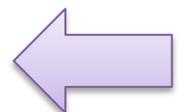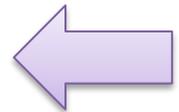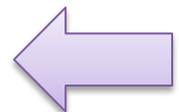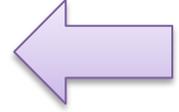
ADMAT/ARE **Year 1 Computing** Pupil Name: Class Teacher:	**Term 1** We are Treasure Hunters – **Using programmable toys (Programming)** We are TV Chefs – **Filming the steps of a recipe (Computational Thinking)**	**Term 2** We are Painters – **Illustrating an eBook (Creativity)** We are Collectors – **Finding images using the web (Computer Network)**	**Term 3** We are Storytellers – **Producing a talking book (Communication and Collaboration)** We are Celebrating – **Creating a card digitally (Productivity)**	Are Related Expectation Key: **NE** = Not Enough Evidence **EM** = Emerging **TI** = Towards Independence **EXP** = Expected **EXP+** = Expected Plus **EXC** = Exceeding
	Assessment: Aut1: Aut2:	Assessment: Sp1: Sp2:	Assessment: Sum1: Sum2:	

A/Computer Science				**B/Information Technology**				**C/Digital Literacy**			
A1. Computer Science **Understand what algorithms are**				**B1.** Information Technology Use technology purposefully to organise, store and retrieve digital content				**C1.** Digital Literacy Use technology safely and respectfully			
EM 1	TI 2	EXP 3	EXC 4	EM 1	TI 2	EXP 3	EXC 4	EM 1	TI 2	EXP 3	EXC 4
A2. Understand how algorithms are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.				**B2.** Use technology purposefully to create and manipulate digital content				**C2.** Keeping personal information private			
EM 1	TI 2	EXP 3	EXC 4					EM 1	TI 2	EXP 3	EXC 4
A3. Create and debug simple programs								**C3**. Identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.			
EM 1	TI 2	EXP 3	EXC 4					EM 1	TI 2	EXP 3	EXC 4
A4. Use logical reasoning to predict the behaviour of simple programs.								**C4.** Recognise common uses of information technology beyond school.			

ARE Guidance Year 1	Not Enough Evidence	Emerging (1) • Fully supported…	Towards Independence (2) • Some support….	Expected (3) • Mostly independently…	Exceeding (4) • Always independently…
A/Computer Science (Problem Solving)	A1. Understand what algorithms are	The child is beginning to understand that goals can be achieved by following a sequence of steps. The child can, with help, understand that simple, real-world problems, such as making a pizza or a smoothie, can be solved by following a sequence of steps in order. (E.g. In 1.1, recognise that the Bee Bot can get to its destination through following a sequence of steps. In 1.2, understand that the steps of a recipe should be followed in cookery. In 1.4, think about the steps they follow to group or sort things.)	The child can understand that goals can be achieved by following a sequence of steps. The child can understand that simple, real-world problems, such as making a pizza or a smoothie, can be solved by following a sequence of steps in order. (E.g. In 1.1, recognise that the Bee Bot can get to its destination through following a sequence of steps. In 1.2, understand that the steps of a recipe should be followed in cookery. In 1.4, think about the steps they follow to group or sort things.)	The child can understand algorithms as sequences of instructions in everyday contexts. The child can take real-world problems and then plan a sequence of steps to solve these. The problems could be moving a Bee Bot from one point to another, or making some simple food items like a sandwich, smoothie or pizza. (E.g. In 1.1, recognise a set of directions as an algorithm. In 1.2, recognise the steps of a recipe as an algorithm. In 1.4, realise that there are algorithms for grouping or sorting things.)	The child can appreciate the need for precise and unambiguous instructions in algorithms. The child can use increasingly precise and unambiguous instructions in creating sequences of instructions. These should typically be for real-world problems such as recipes or moving a Bee Bot. (E.g. In 1.1, know that instructions for a Bee Bot need to be precise. In 1.2, know that the steps of a recipe need to be precise and unambiguous. In 1.4, recognise that to group or sort things, a computer or robot would need very precise instructions.)
Evidence:					
	A2. Understand how algorithms are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions	The child is beginning to program floor turtles using individual instructions according to a plan. The child can, with help, program a Bee Bot, or similar floor robot, one instruction at a time, pressing the movement buttons, then Go, then clearing at each step. (E.g. In 1.1, give the Bee Bot single instructions.)	The child can program floor turtles using individual instructions according to a plan. The child can program a Bee Bot, or similar floor robot, one instruction at a time, pressing the movement buttons, then Go, then clearing at each step. (E.g. In 1.1, give the Bee Bot single instructions.)	The child can program floor turtles using sequences of instructions to implement an algorithm. The child can create a Bee Bot (or similar) program using a number of steps in order before pressing the Go button. The length of the child's programs might increase over the year. (E.g. In 1.1, create a Bee Bot program, implementing the complete algorithm for their solution.)	The child can appreciate that programming a digital device involves commands in a formal language. The child can show some understanding of Bee Bot instructions being taken from a very specific, clearly defined language, in which each command produces a certain, predictable output. There should be some sense of the child developing an understanding of a programming language as a way in which people can give commands to digital devices. (E.g. In 1.1, recognise that the Bee Bot only accepts a small number of different commands.)
Evidence:					
(Programming)	A3. Create and debug simple programs	The child is beginning to give instructions, one at a time, to a floor turtle.	The child can give instructions, one at a time, to a floor turtle.	The child can give a sequence of instructions to a floor turtle.	The child can give a sequence of instructions to a floor turtle, correcting mistakes.

		The child can, with help, create a program for a Bee Bot by entering instructions one at a time, literally stepping through their code as they do. This level of interaction allows the child to correct bugs in their programs as they arise. (E.g. In 1.1, give the Bee Bot instructions one at a time.)	The child can create a program for a Bee Bot by entering instructions one at a time, literally stepping through their code as they do. This level of interaction allows the child to correct bugs in their programs as they arise. (E.g. In 1.1, give the Bee Bot instructions one at a time.)	The child can create a Bee Bot program using a sequence of instructions before running it using the Go button. The length of the child's programs might be expected to increase over the course of the year. (E.g. In 1.1, give the Bee Bot a complete program.)	The child can run programs on a Bee Bot as a quite lengthy sequence of instructions. The child can work out where bugs are in their program, reset the Bee Bot and enter corrected code. Typically, the child will need to have some way to record their programs before entering them, such as a whiteboard, Bee Bot instruction cards or the Blue Bot app. (E.g. In 1.1, give the Bee Bot a complete program, and then debug this to correct any errors.)
Evidence:					
(Logical Thinking)	**A4.** Use logical reasoning to predict the behaviour of simple programs	The child is beginning to make predictions about what a program will do. The child can, with help, make a prediction of what they think a program will do next. This could be a program (perhaps for a Bee Bot) that they or their peers have written, or it could be a familiar piece of software (including computer games). The child could use an audio recorder or video camera to capture their predictions. (E.g. In 1.1, predict what another child's Bee Bot program will do when run.)	The child can make predictions about what a program will do. The child can make a prediction of what they think a program will do next. This could be a program (perhaps for a Bee Bot) that they or their peers have written, or it could be a familiar piece of software (including computer games). The child could use an audio recorder or video camera to capture their predictions. (E.g. In 1.1, predict what another child's Bee Bot program will do when run.)	The child can give explanations for what they think a program will do. The child can explain to the teacher, and to peers, what they think a program will do. This could be a program they or their peers have written, or it could be a familiar piece of software (including computer games). The child could use an audio recorder or video camera to capture their explanations. (E.g. In 1.1, explain what their own or another child's program will do before it is run.)	The child can give logical explanations for what they think a program will do. The child should be able to give carefully reasoned explanations of what a program will do under given circumstances, including some attempt at explaining why it does what it does. The program could be one they themselves have written or it could be a computer game or a familiar piece of software. The child could use an audio recorder or video camera to record their explanation. (E.g. In 1.1, give a logical explanation for what a Bee Bot program will do and defend that explanation when questioned.)
Evidence:					
B/Information Technology **(Creating Content)**	**B1.** Use technology purposefully to organise, store and retrieve digital content	The child is beginning to store content on digital devices. The child can, with help, use a range of digital technologies to store digital content. These might	The child can store content on digital devices. The child can use a range of digital technologies to store digital content. These might include	The child can use digital technology to store and retrieve content. The child can use a range of digital technologies to store and access digital content. These might include	The child can use digital technology to organise, store and retrieve content The child can use a range of digital technologies to store, access and organise digital content. Typically, they

		include laptop computers, tablets, smartphones, digital cameras, video cameras and audio recorders. Projects might include videoing one another cooking, creating content for an e-book or an audio book, creating a greetings card. (E.g. In 1.2, film a child cooking. In 1.3, save their work. In 1.4, import images and save their work. In 1.5, record audio. In 1.6, import images and save their work.)	laptop computers, tablets, smartphones, digital cameras, video cameras and audio recorders. Projects might include videoing one another cooking, creating content for an e-book or an audio book, creating a greetings card. (E.g. In 1.2, film a child cooking. In 1.3, save their work. In 1.4, import images and save their work. In 1.5, record audio. In 1.6, import images and save their work.)	laptop computers, tablets, smartphones, digital cameras, video cameras and audio recorders. Projects might include videoing one another cooking, developing an e-book or an audio book, creating a greetings card. (E.g. In 1.2, film and upload a child cooking. In 1.3, open the e-book, import illustrations, add them to the e-book and save their work. In 1.4, retrieve previous work, import further illustrations and save their work. In 1.5, open the template, record audio, import it to the computer and save their work. In 1.6, open the card template, find images online and save their work.)	can use a laptop computer, tablet or smartphone to help organise content, such as by moving this between one document and another or by moving content within the file system or on a document. Projects might include videoing one another cooking, developing an e-book or an audio book, creating a greetings card. (E.g. In 1.2, film and upload a child cooking. In 1.3, import illustrations, add them to the e-book and save their work. In 1.4, import illustrations, use PowerPoint to organise these according to the tasks, and save their work. In 1.5, record audio and import it to the computer, add audio to the correct pages in their presentation and save their work. In 1.6, find images online, add them appropriately to their e-card and save their work.)
Evidence:					
	B2. Use technology purposefully to create and manipulate and digital content	The child is beginning to create content on a digital device. The child can, with help, create their own original digital content using handheld devices. These would typically be digital cameras, video cameras and audio recorders, but the equivalent apps on a smartphone or tablet might be used. Projects might include videoing one another cooking or making recordings for an audio book. (E.g. In 1.2, film digital video. In 1.5, record original digital audio.)	The child can create content on a digital device. The child can create their own original digital content using handheld devices. These would typically be digital cameras, video cameras and audio recorders, but the equivalent apps on a smartphone or tablet might be used. Projects might include videoing one another cooking or making recordings for an audio book. (E.g. In 1.2, film digital video. In 1.5, record original digital audio.)	The child can create original content using digital technology. The child can create their own original digital content using a range of technologies. These might include laptop computers, tablets, smartphones, digital cameras, video cameras and audio recorders. Projects might include videoing one another cooking, developing an e-book or an audio book, creating a greetings card. Look for some indication of the child's creativity in this work. (E.g. In 1.2, film digital video. In 1.3, create an original painting. In 1.5, create original digital audio. In 1.6, type their own text.)	The child can create and edit original content using digital technology. The child can create and edit their own original digital content using a range of technologies. Content-creation technology might include laptop computers, tablets, smartphones, digital cameras, video cameras and audio recorders, although editing is likely to take place on laptops or tablets. Projects might include videoing one another cooking, developing an e-book or an audio book, creating a greetings card. Look for some indication of the child's creativity in this work as well as evidence that they have edited content. (E.g. In 1.2, film digital video and edit this on the computer. In 1.3, create and edit an original painting. In 1.5, create original

					digital audio, using editing tools, if available. In 1.6, type and edit their own text.)
Evidence:					
C/Digital Literacy **(Online Safety)**	**C1** Use technology safely and respectfully	The child is beginning to acknowledge the need to stay safe when using technology. The child can, with help, understand that they need to be kept safe when using technology. E.g. They should be required to use filtered SafeSearch when looking for images on the web. (E.g. In 1.3, 1.4 and 1.6, they can keep safe when searching for images.)	The child can acknowledge the need to stay safe when using technology. The child can understand that they need to be kept safe when using technology. E.g. They should be required to use filtered SafeSearch when looking for images on the web. (E.g. In 1.3, 1.4 and 1.6, they can keep safe when searching for images.)	The child can keep themselves safe while using digital technology. The child can understand that they need to keep safe when using digital technology. E.g. They should know to use filtered SafeSearch when looking for images on the web and that they should close the lid of a laptop (or similar action) if they find inappropriate images. (E.g. In 1.3, 1.4 and 1.6, close the laptop lid (or similar) and tell a teacher if they find inappropriate images.)	The child can keep safe and show respect to others while using digital technology. The child can understand that they need to keep safe when using digital technology. E.g. They should know to use filtered SafeSearch when looking for images on the web and close the lid of a laptop (or similar action) if they find inappropriate images. They should know to respect others' rights, including privacy and intellectual property when using computers, so should not look at someone else's work or copy it without permission. (E.g. In 1.3, 1.4 and 1.6, close the laptop lid (or similar action) and tell a teacher if they find inappropriate images, and only copy images where they have permission to do so.)
Evidence:					
	C2. Keeping personal information private	The child is beginning to understand that some information should be kept private. The child should understand that some information is personal and should only be shared by those who they or their parents trust. E.g. The child should recognise that audio or video recordings they make in school are personal. (E.g. In 1.2 and 1.5, know that some video and audio should be kept private.)	The child can understand that some information should be kept private. The child should understand that some information is personal and should only be shared by those who they or their parents trust. E.g. The child should recognise that audio or video recordings they make in school are personal. (E.g. In 1.2 and 1.5, know that some video and audio should be kept private.)	The child can understand that information on the internet can be seen by others. The child should be aware that information stored on the web or transmitted via the internet is available to other people. E.g. They should know that the images they find online can be found by others too, and that the queries they type in can be seen by those who run the search engine they use and the school's network. (E.g. In 1.3, 1.4 and 1.6, realise that	The child can start to understand what information about themselves should be kept private. The child should understand that personal information should be kept private: it should not be posted online to a public audience and should only be shared privately with those who the child (or their parents) would trust. E.g. The child should recognise that audio or video recordings they make in school should not normally be posted online. (E.g. In 1.2 and 1.5, understand that their video and audio recordings should not

				the images they search for can be seen by others.)	normally be posted online.)
Evidence:					
	C3. Identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies	The child is beginning to understand what to do if they see disturbing content online at school. The child should know to close the laptop lid or turn the tablet over if they find content, such as inappropriate images, which might disturb them or other children. They should know to tell their teacher if this happens in school. (E.g. In 1.3, 1.4 and 1.6, know to close the laptop lid or turn the tablet over and tell a teacher if they find inappropriate images.)	The child can understand what to do if they see disturbing content online at school. The child should know to close the laptop lid or turn the tablet over if they find content, such as inappropriate images, which might disturb them or other children. They should know to tell their teacher if this happens in school. (E.g. In 1.3, 1.4 and 1.6, know to close the laptop lid or turn the tablet over and tell a teacher if they find inappropriate images.)	The child can understand what to do if they see disturbing content online at home or at school. The child should know to close the laptop lid or turn the tablet over if they find content, such as inappropriate images, which might disturb them or other children. They should know to tell their teacher or their parents if this happens. (E.g. In 1.3, 1.4 and 1.6, know to close the laptop lid or turn the tablet over and tell a teacher or their parents if they find inappropriate images.)	The child can understand what to do if they have concerns about content or contact online. The child should know to close the laptop lid or turn the tablet over if they find content, such as inappropriate images, which might disturb them or other children; if someone they don't trust contacts them online; if someone makes inappropriate contact online. They should know to tell their teacher or their parents if this happens, and be aware that they could talk to another trusted adult or to Childline about this. (E.g. In 1.3, 1.4 and 1.6, know to close the laptop lid or turn the tablet over and tell a teacher, their parents, another trusted adult or Child Line if they find inappropriate images.)
Evidence:					
(Using IT Beyond School)	**C4.** Recognise common uses of information technology beyond school	The child is beginning to name some uses of IT beyond school. The child can, with help, mention some of the ways in which IT is used beyond school. Examples could be watching videos, creating paintings, typing stories, listening to music or audio books, sending messages. (Examples could include video in 1.2, painting and e-books in 1.3, audio in 1.5 and e-cards in 1.6.)	The child can name some uses of IT beyond school. The child can mention some of the ways in which IT is used beyond school. Examples could be watching videos, creating paintings, typing stories, listening to music or audio books, sending messages. (Examples could include video in 1.2, painting and e-books in 1.3, audio in 1.5 and e-cards in 1.6.)	The child can show an awareness of how IT is used for communication beyond school. The child can mention some of the ways in which IT is used to communicate beyond school. E.g. They might know that some people use social media such as Facebook, email, video calls or online greetings to say happy birthday to their friends. (E.g. In 1.6, be aware that many people send greetings online rather than using cards now.)	The child can show an awareness of how IT is used for a range of purposes beyond school. The child can name a number of purposes for which IT is used beyond school. E.g. They might know that modern TVs use digital technology, that books are often available in a digital format, that music is often recorded using computers and that people often communicate using computers these days. (E.g. In 1.2, know that TV uses digital technology. In 1.3, be aware of e-books. In 1.5, be aware that audio is recorded

					digitally. In 1.6, be aware that some people send e-cards rather than paper cards now.)
Evidence:					