

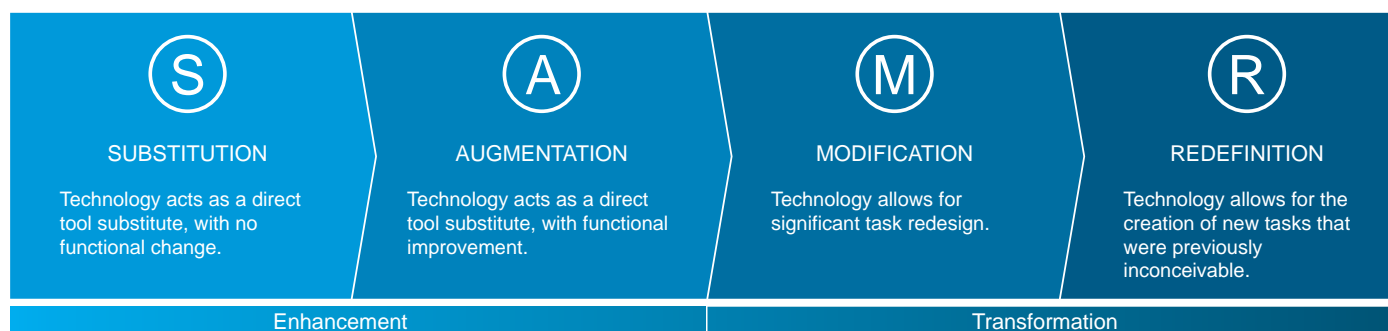


INTRODUCTION

This book has been created to help teachers in Malta and Gozo use LearnPad tablets effectively in the classroom. Our aim is for it to be a useful document that teachers can pick up and refer to often, with a wealth of ideas and resources to support schools as they begin their journey on the One Tablet Per Child project.

The teaching ideas have been planned and designed by experienced teachers. They focus on using the tablet as a tool in the classroom to facilitate learning and improve digital literacy. We believe that technology should be used in context in the classroom and should be accessible to all, so we've also included a range of suggestions for differentiating your teaching for all students.

The planned activities have been carefully chosen to foster creativity and collaboration, guiding pupils and teachers through the process of embedding technology in their approach to learning. We recognise that this process requires support and scaffolding. We've referred to the SAMR model, which explains the different levels of embedding technology in education:



Each section's cover page has teaching ideas that link to the four stages of the SAMR model. On these pages you'll also find a QR Key – scan this using your LearnPad Workbook to load a customised Lesson Profile, containing all the Apps and links you'll need for that section.

The LearnPad system is designed to make communication and feedback as easy as possible. Work can be viewed in real time by the teacher, or 'Handed In' wirelessly to ClassCloud. Teachers can send specific files or messages to students, and complete this feedback cycle – crucial for improving progress. Our ClassView technology also allows for seamless collaborative working in the classroom. Screens of all pupils' devices can be displayed simultaneously on the teacher's screen, creating a group workspace – or a single device can be shared full-screen, offering valuable prompts for discussion or peer-assessment.

We hope that this book will provide opportunities for you to open up creativity, collaboration and communication in your classroom, giving you the confidence to make the best use of these powerful tools. As education professional ourselves, we understand that a teacher's time is precious – that's why we've worked hard to make sure these lessons ideas are useful and practical. We're here to help make sure that your experience with Avantis technology is enjoyable and rewarding. Please get in touch if you have any feedback or queries.



In the following section, you'll find differentiated activity ideas linked to all the Year 4 Outcomes for The Number System.

Scan the QR key to the right to launch the lesson profile on your LearnPad and explore the resources and tools we've chosen for this curriculum area.



S

SUBSTITUTION

Use Fraction Matcher to match different visual and written representations of fractions.

A

AUGMENTATION

Create a presentation in LearnPad Office Suite to explain the difference between odd and even numbers – use images of cubes or other apparatus to illustrate thinking.

M

MODIFICATION

Use the Number Grid template in WorkSpace to highlight multiples of 2, 3, 4, 5, 8 or 10 in specific colours then Hand In to ClassCloud to share with others.







R







REDEFINITION




Create a stop-motion animation in Animator to show the composition of a five-digit number – you could use/make arrow cards or other physical resources to do this.

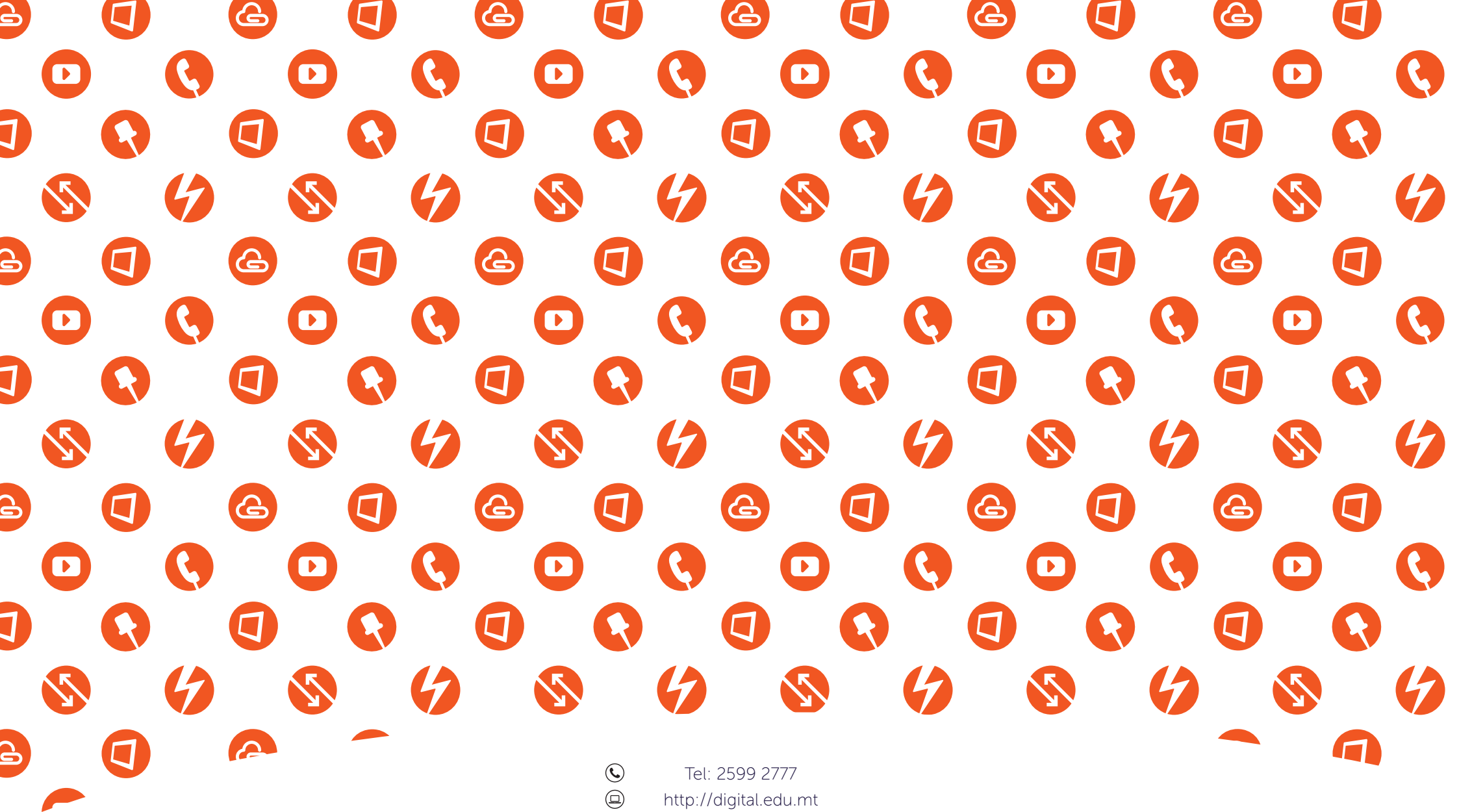
Enhancement

Transformation

Outcome	Which App?	Practical Ideas for Pupils	Differentiation	
			Extra Support	Extra Challenge
I can read, write and order whole numbers to ten thousand in figures and words.		Teacher calls out a number and each pupil writes it quickly on their screen; teacher views on their computer privately for instant assessment opportunity.	Support by supplying digit cards and asking pupils to write word (and vice versa).	Pupils can work in pairs challenging each other with 'I'm thinking of a number' clues.
I can recognise, read and position whole numbers on a number line.		Work with a partner, each with a LearnPad – each draw a line across the screen. Agree on minimum and maximum numbers. Take it in turns to call out a number between these and challenge your partner to place it correctly; show and explain your reasoning.	Hand Out an image of a number line with some numbers marked to support visualisation.	Draw a mark on the line and challenge your partner to justify what number it could be.
I can understand the place value of any digit in a whole number up to ten thousand.		Practise using Place Value Charts initially. Create an animation to show the composition of a five-digit number – could use/make arrow cards, or use physical resources to do this.	Use Number Pieces to practise creating numbers up to a thousand visually.	Generalise: what does this tell you about much larger numbers?
I can compare and order whole numbers up to ten thousand and include symbols such as $<$, $>$ or $=$.		Work in groups of three. Two pupils use Neighbour Sharing to send a number to third pupil (could generate this by rolling dice), who places correct symbol between them.	Provide practical equipment to scaffold understanding.	Extend by sending calculations, rather than just numbers; (e.g. $1000+28 < 600+608$).
I can read, say, order and write ordinal numbers to one hundred.		Work in pairs or small groups to create a list of rules for an alien: how do you turn a cardinal number into an ordinal number – which suffix do you add/how does the word change? Could use Notes, or alternatively Deck Slideshow or even Aurasma.	Work in mixed ability pairs to scaffold learning.	
I can identify odd and even numbers to ten thousand.		Create a presentation to explain the difference between odd and even numbers – use images of cubes or other apparatus to illustrate your thinking.	Use Number Pieces or Number Rack to visually explore odd/even.	Make predictions about larger numbers using your finding.

<p>I can count forward and backwards in 1s, 2s, 10s and 100s starting from any whole number less than or equal to 1000.</p> <p>I can count forward and backwards in steps of 3, 4, or 5 to and from any whole number less than or equal to 50.</p> <p>I can count forward/backwards in steps of 25 and 50 to/from 500.</p>		<p>Create a bank of videos for younger children, teaching them how to count in steps. Think about how to support the counting visually – you could use cubes/blocks, could draw a number line, could draw chalk squares in playground etc.</p>	<p>Use Number Line to support counting in steps with a visual model.</p>	<p>Create a rule to generalise counting in steps; e.g. what do you know about all the numbers you will say when counting in 5s starting from 8?</p>
<p>I can recall the first ten multiples of the following numbers: 2, 3, 4, 5, 8 & 10.</p>		<p>Change the background, select Templates and find Number Grid. Highlight the multiples in a chosen colour.</p>	<p>Use Number Pieces or Number Line to explore multiples visually.</p>	<p>Create a rule to work out the next ten multiples – are there any patterns?</p>
<p>I can understand what a half and a quarter are and can recognise them in shapes and in small numbers of objects.</p>		<p>Change the background, select Templates and choose a shape. Draw lines to divide shape into halves or quarters.</p>	<p>Fold paper shapes in half first before abstracting.</p>	<p>Use this to begin to explore equivalence with quarters and halves.</p>
<p>I can understand that 0.1 represents a tenth.</p> <p>I can understand that 0.5 represents a half.</p>		<p>Use Number Pieces to demonstrate tenths and other decimals – in this case, a tens rod can represent one.</p>	<p>Use physical tens rods first to consolidate, matching to decimals.</p>	<p>Use Number Pieces to explore addition of tenths; what happens after ten tenths?</p>
<p>I can recognise simple fractions that are parts of a whole.</p>		<p>Use Fraction Matcher to match different visual and written representations of fractions.</p>	<p>Levels within Fraction Matcher.</p>	
<p>I can recognise mixed numbers which include a whole number and a fraction.</p>		<p>Use Fraction Matcher to practise matching different representations of mixed numbers.</p>	<p>Levels within Fraction Matcher.</p>	

I can recognise and use simple equivalent fractions.		Change the background, select Templates and choose Fraction Grid. Label the fractions to demonstrate equivalence.	Work in mixed-ability pairs.	
I can compare and order simple fractions and position them on a number line.		Work with a partner, each with a LearnPad – each draw a line across the screen. Agree on minimum and maximum numbers. Take it in turns to call out a fraction between these and challenge your partner to place it correctly; show and explain your reasoning.	Only work with fractions between 0 and 1.	Add mixed numbers.
I can state one number lying between two whole numbers.		Quick-fire questioning – write a number that lies between the two whole numbers called out by the teacher.	Differentiation by outcome; less confident students can practise with halves or simple fractions, more confident with decimals.	

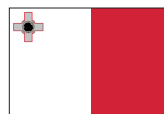


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Operational Programme II - European Structural and Investment Funds 2014-2020

"Investing in human capital to create more opportunities
and promote the well-being of society"

Project may be considered for part-financing by the European Social Fund

Co-financing rate: 80% European Union; 20% National Funds

