Exploring **Chance** in Mathematics integrating Digital Technologies: Year 5-6

This representation shows the connected content descriptions for Mathematics and Digital Technologies and examples that could fit into a teaching and learning program, developed by teachers.

Describing probability of rolling a six on a six-sided die ie 1/6 or 0.1666 or 16.66%

Describing probability of heads when tossing a coin as 1/2, 0.5 or 50%

Describe probabilities using fractions, decimals and percentages

ACMSP144

Design, modify and follow simple algorithms involving sequences of steps, branching, and iteration (repetition)
ACTDIP019

Experimenting with different ways of representing an instruction to make a choice, for example branches in a tree diagram

Implement digital solutions as simple visual programs involving branching, iteration (repetition), and user input

ACTDIP020

Conduct chance experiments with both small and large numbers of trials using appropriate digital technologies
ACMSP145

Designing and creating a solution that is interactive, using a visual programming language. BBC MicroBit example **Dice roll**
Scratch example: Two dice probability.

Conducting repeated trials of chance experiments, identifying the variation between trials and realising that the results tend to the prediction with larger numbers of trials

Exploring Texts (**Blogs**) in English integrating Digital Technologies: Year 5-6

This representation shows the connected content descriptions for English and Digital Technologies and examples that could fit into a teaching and learning program, developed by teachers.

Investigate 'What is a blog?' and 'What makes a good blog?'

What can our class blog be about?

English: Participate in and contribute to discussions, clarifying and interrogating ideas, developing and supporting arguments, sharing and evaluating information, experiences and opinions (ACELY1709)

Create a set of guidelines that considers and identifies protocols when developing and creating a blog, eg personal information, copyright, feedback and acting responsibly online.

Digital Technologies: Plan, create and communicate ideas and information, including collaboratively online, applying agreed ethical, social and technical protocols (ACTDIP022)

English: Create literary texts that adapt or combine aspects of texts students have experienced in innovative ways (ACELT1618)

Use collaborative tools to share ideas online using agreed protocols eg acting responsibly online.

Refer to Class blog.

Use an agreed set of guidelines to create the class blog.

Exploring **Consumer choices** in Economics and business (Year 5) integrating Mathematics (Year 5), Digital Technologies: Year 5-6

This representation shows the connected content descriptions for Economics and business, Mathematics and Digital Technologies and examples that could fit into a teaching and learning program, developed by teachers.

applying mental strategies to estimate the result of calculations, such as estimating the cost of a supermarket trolley load

Mathematics: Use estimation and rounding to check the reasonableness of answers to calculations

ACMNA098

Digital Technologies: Design, modify and follow simple algorithms involving sequences of steps, branching, and iteration (repetition) ACTDIP019

Experimenting with a flow chart to show how a checkout works and how barcode data is integrated into the solution. Consider how item costs are calculated.

Digital Technologies: Implement digital solutions as simple visual programs involving branching, iteration (repetition), and user input ACTDIP020

HAAS: Influences on consumer choices and methods that can be used to help make informed personal consumer and financial choices ACHASSK121

Designing and creating a digital solution to show how a supermarket checkout works using a visual programming language.

Introduce variables. Refer to Check out the checkout

recognising that financial transactions can include the use of notes, coins, credit and debit cards, considering how these may influence the way people purchase items

Exploring **electrical energy** in science integrating Digital and Design Technologies: Year 5-6

This representation shows the connected content descriptions for Science and Digital and Design Technologies and examples that could fit into a teaching and learning program, developed by teachers.

Investigating different electrical conductors and insulators

Recognising the need for a complete circuit to allow the flow of electricity

DIGITAL TECHNOLOGIES Examine the main components of common digital systems and how they may connect together to form networks to transmit data

ACTDIK014

SCIENCE: Electrical energy can be transferred and transformed in electrical circuits and can be generated from a range of sources

ACSSU097

Exploring the use of a programming board such as Makey Makey to input data replacing a keyboard connecting to conductive materials

Refer to: Makey Makey boards

DESIGN TECHNOLOGY: Select appropriate materials, components, tools, equipment and techniques and apply safe procedures to make designed solutions
ACTDEP026

DESIGN TECHNOLOGY: Investigate how electrical energy can control movement, sound or light in a designed product or system

ACTDEK020

Investigating the properties of materials to solve problems requiring the control of movement, sound or light,

Designing and creating a solution that integrates an electric circuit to solve a particular design problem such as a game or sound maker project.

Refer to Makey Makey Projects for Years 4-6