**Games**

**The main activity in this context is a creative challenge to design, produce and market a new game. It begins by research the history of games before playing and exploring games from different genres. Rules and algorithms are then explored in detail, before pupils are asked to collaborate on the game design task.**

**Green tasks could be completed in school or at home**

**Purple tasks demonstrate IDL**

Please note that these are **suggestions** and by no means prescriptive. Teachers are welcome to use and adapt plans and resources to suit their needs.

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| **Suggested Blocks of Learning** | **Suggested Learning Experiences**  | **CfE Experiences and Outcomes** |
| **Researching Games** | Explore and play some traditional playground games, e.g. Hopscotch. Ask the pupils to come up with some new ideas for playground games. Compare these to more modern games played by the pupils. Research the history of a game of your choice, this could be a traditional game, board game, sport or video game. Write a report on the game based on your research, this report can be adapted into a presentation. | Using what I know about the features of different types of texts, I can find, select and sort information from a variety of sources and use this for different purposes. LIT 2-14aI consider the impact thatlayout and presentation willhave and can combinelettering, graphics and otherfeatures to engage my reader.LIT 2-24aI can extend and enhance my knowledge of digital technologies to collect, analyse ideas, relevant information and organise these in an appropriate way. **TCH 2-01a** |
| **Playing Games****In this block the pupils should have experience of playing a variety of different games, adapted for use in the classroom. The purpose of this block is to explore a variety of different game genres their rules to prepare the pupils for the creative design task.** **Please note that not all of the games have to be played.**  | **Battle Ships**Use the Battleships resource to play a class game of battle ships using coordinates, repeat the game until all the pupils have had a turn and understand the rules. Provide each pupil with [10x10 blank Battleships grid](https://free-printable-paper.com/printable-battleship-game/), explain how to draw the battleships and how the coordinate system works, this can be played with grid references or point coordinates. Pupils then play against each other.Play battle ships with family members. Design a new themed coordinate game base on Battleships e.g. with a sporting, fantasy or science fiction theme.  | I can use my knowledge of the coordinate system to plot and describe the location of a point on a grid. **MTH 2-18a**I have the opportunity to choose and explore an extended range of media and technologies to create images and objects, comparing and combining them for specific tasks. **EXA 2-02a** |
| **Games of chance and uncertainty**Discuss the concept of chance and uncertainty through games e.g. heads or tails, dice games, rock/paper/scissors and card games such as 21 or higher or lower. Programme a BBC Micro:bit (or use the app) to play heads or tails, dice or rock/paper/scissors using these [project guides](https://microbit.org/projects/make-it-code-it/). Play card games with family members involving chance and uncertainty e.g. 21, higher or lower. Create a new coin, card game or dice game to play.  | Chance and uncertaintyI can conduct simple experiments involving chance and communicate my predictions and findings using the vocabulary of probability. **MTH 2-22a** |
| **Scrabble**Make and print off a single set of large Scrabble tiles (Google image search). This version of Scrabble is played in a similar way to countdown. Choose seven tiles to display in the class, pupils score points individually by creating the best word. Choose a new set of seven tiles and continue until all the tiles have been used up. Play scrabble using the App or game board. Test your spelling getting – scrabble scores for correct spelling words.  | I can spell most of the words I need to communicate, using spelling rules, specialist vocabulary, self-correction techniques and a range of resources. **LIT 2-21a** |
| **Trivial Pursuit**Play a class quiz based on Trivial Pursuit with questions linked to different categories of current learning in school. Print off and laminate the ‘cheeses’, making up a category for each one. Alternatively, play this game with tricky questions that the pupils have to research the answer online within a certain time. Work independently or in teams create your own themed quiz using Microsoft forms or equivalent; complete each other’s quizzes.  | *Examples are given below but this activity can be mapped to any relative outcome.* I can use primary and secondary sources selectively to research events in the past. **SOC 2-01a** To extend my mental map and sense of place, I can interpret information from different types of maps and I am beginning to locate features within Scotland, UK, Europe and the wider world. **SOC 2-14a** |
| **‘Escape Room’**Use [this link](https://glowscotland-my.sharepoint.com/%3Af%3A/g/personal/gw13dormancolin_glowmail_org_uk/EiLtio5ua-9MpccYACvDQboB8Rb7lOtXn-5rYlq1tK2SiQ?e=bYUMtN) to create an online code cracker activity. Pupils can be supplied with a single combination lock attached to a prize, the final code is revealed once the other codes have been cracked. Alternatively a winning message or a final clue can be revealed.  Design your own code cracker activity for classmates to solve using the Escape Room resource. Play an escape Room apps available that pupils can play at home.  |  I can create, develop and evaluate computing solutions in response to a design challenge. **TCH 2-15a**  |
| **Murder Mystery**Play a Murder Mystery with the pupils, an example can be found [here](http://www.primaryresources.co.uk/maths/pdfs/murder_mystery_maths.pdf). The challenges can be adapted to suit current learning across the curriculum or as a basis for writing your own murder mystery narrative story.Play Cluedo at home. Make your own murder mystery activity to be solved by your classmates  | I enjoy creating texts of my choice and I regularly select subject, purpose, format and resources to suit the needs of my audience. **LIT 2-20a** |
| **Labyrinth**Print some examples of mazes for the pupils to solve. These can start off simple and become increasingly more complex. Pupils can use a grid to design their own maze. Build a ball maze using marbles and Lego ([see this example](https://wearehappyplaying.blogspot.com/2015/03/how-to-build-duplo-marble-maze.html)). Build a maze in Minecraft for your classmates to solve.  | I have the opportunity to choose and explore an extended range of media and technologies to create images and objects, comparing and combining them for specific tasks. **EXA 2-02a**Through observing and recording from my experiences across the curriculum, I can create images and objects which show my awareness and recognition of detail. **EXA 2-04a**I can extend and enhance my design skills to solve problems and construct models. **TCH 2-09a**  |
| **Myst**The game ‘Myst’ (available on most platforms) is a ‘point and click’ adventure game where the character has to explore and escape from a strange island. Ideas on how to use this game can be found [here](https://www.tes.com/teaching-resource/myst-planning-week-1-doc-6023524), this game is particularly useful for enhancing the teaching of imaginative writing. Explore the Island of ‘Myst’ at home or create your own map of a fantasy island.  | Having explored the elements which writers use in different genres, I can learn what I use to create stories with an interesting and appropriate structure, interesting characters and/or settings which come to life. **ENG 2-31a**  |
| **Algorithms in Games**  | Provide the pupils with only [this board game](https://glowscotland-my.sharepoint.com/%3Af%3A/g/personal/gw13dormancolin_glowmail_org_uk/EiLtio5ua-9MpccYACvDQboB8Rb7lOtXn-5rYlq1tK2SiQ?e=bYUMtN), counters and dice. Ask the pupils to play the game. After a period of time ask the pupils what is wrong with the game. The squares on the board game acts as an algorithm (process or set of rules) to be followed. This demonstrates how important it is to be clear when creating instructions and that this applies to wider game design and computer programming. Create an improved version of the game board. Research how algorithms are used in computer programming. Use [Scratch](https://scratch.mit.edu/) or a similar application to programme some algorithms.  | I can explain core programming language concepts in appropriate technical language. **TCH 2-14a** I can convey information, describe events, explain processes or combine ideas in different ways. **LIT 2-28a** |
| **Rules**  | Discuss: Why are rules important? Where else do we have rules? Create a matching activity where the pupils have to match the rules to the game or sport. Write step by step rules to a familiar game. Compare your rules to the actual rules included with the game.  | When I engage with others, I can respond in ways appropriate to my role, show that I value others’ contributions and use these to build on thinking. **LIT 2-02a** |
| **Design a Game****In this block of learning, pupils use their prior knowledge of games to design and create their own game. The game should have clear rules and can be accompanied by a video explanation or advert.**  | Pupils are asked to design and create a new game either working individually or collaboratively. This could also be a new board game, video game or sport. The pupils should apply prior learning to ensure that the game is playable, with a clear set of instructions and that it looks interesting and attractive. Develop your brand by creating a logo, mascot and hashtag. Design or create a box for your game.  | I can extend and enhance my design skills to solve problems and can construct models. TCH 2-09aI can create, develop and evaluate computing solutions in response to a design challenge. **TCH 2-15a**I can develop and communicate my ideas, demonstrating imagination and present at least one possible solution to a design problem. **EXA 2-16a**  |
| Write the rules of your game. Are your rules clear? Share them online with your classmates or at home with your family for feedback.  | I can convey information, describe events, explain processes or combine ideas in different ways. **LIT 2-28a** |
| Storyboard then create an advert for your game using iMovie or an alternative. An iMovie trailer can be used for this task and pupils may wish to include animation.Create an ‘unboxing’ or instructional video for your game.  | I can extend and enhance my knowledge of digital technologies to collect, analyse ideas, relevant information and organise them in an appropriate way. **TCH 2-01a** I have the opportunity to choose and explore an extended range of media and technologies to create images and objects, comparing and combining them for a specific task. **EXA 2-02a**  |
| Presentation: pupils demonstrate their creativity and achievements by showcasing their game, accompanying construction/artwork and video. Invite partners and stakeholders to the presentations. Judges can be used to award prizes for the best game. Practise your presentation at home.  | I am developing confidence when engaging with others within and beyond my place of learning. I can communicate in a clear and expressive way and I am learning to select and organise resources independently. **LIT 2-10a** I have experienced the energy and excitement of presenting/ performing for audiences and being part of an audience for other people’s presentations/ performances. **EXA 2-01a**  |