



SHAUN'S GAME ACADEMY

FAMILY COMPETITION RESOURCES

Shaun's Game Academy is a game-building competition that invites individuals and families to design games about Shaun the Sheep using a programming software called Scratch. The competition aims to direct the energy and enthusiasm many children and young people have for playing games into developing their own digital skills and exciting creations.

A separate category has been created for families and further details of this competition can be found [here on the family competition web site](#).

This guide aims to help you and your family design and build a game together. It contains practical tips, creative activities and links to resources that support all generations in a family learn together in the inspiring world of Shaun the Sheep.

HELPING YOU BUILD A GAME

Some of you will be new to game playing and most of you are probably new to game building. There are many resources on the Game Academy web site that can help you on your journey.

Aardman Animations has created a set of five learning modules that include inspirational videos and step-by-step tutorials on Scratch coding that show how to build a game – see the '[Learn and Make](#)' section of the Game Academy web site. While the learning modules focus on teaching you how to use Scratch and code your game, the materials in this guide lead you through the process of creatively designing and planning your game. This guide is divided into 4 sections with 7 activities, as shown below:

Keep in mind that Aardman also accepts paper-based information like sketches, plans and ideas that didn't quite make it into the game as part of your entry, so some of the creative activities in the following pages could also be sent in with your entry if you choose!

SECTION	WHAT IT INCLUDES	ACTIVITIES (INCLUDING TIME TO ALLOW FOR EACH ACTIVITY*)
1: Getting started	<ul style="list-style-type: none"> Plan and organise family game building sessions Scratch tips and support 	Activity 1: Role cards (15 mins) Activity 2: Planning calendar (1 hour) Video: Learning Module 1 – Getting Started
2: Design your game	<ul style="list-style-type: none"> Understand what makes a 'good' game Learn about Shaun the Sheep characters Plan your game design 	Activity 3: Play games! (30 mins - 1 hour) Activity 4: Learn about Shaun and friends (30 mins – 1 hour) Activity 5: Design your game (1 hour) Video: Learning Module 2 – Game Design
3: Develop your characters	<ul style="list-style-type: none"> Help develop characters in your game 	Activity 6: Develop your characters (1 hour) Video: Module 3 – Character development
4. Develop your game levels	<ul style="list-style-type: none"> Develop and plan your game levels 	Activity 7: Design your levels (15-20 mins per level) Video: Module 4 – Game Levels

*Time required per module depends on each family. The times provided here show an average of the families we worked with in developing these materials. They also do not include the time required to make your game in Scratch!

"It's a good idea to try to get families to work together. When you see the end result, you realise that you can produce something really good in the end by working together."

- MOLLY, AGE 12

1: GETTING STARTED

While lots of information and support on the competition can be found on the Game Academy web site, it may still seem overwhelming to get started, so below are some ideas on how to begin:

WHAT YOU NEED TO GET STARTED:

- *Computer* – Scratch only works on desktop computers or laptops. It is not currently available as a mobile device app (so will also not work on tablets like iPads).
- *Access to the internet*
- *Scratch learning modules* – To use the Aardman learning modules, you can read through them online, in which case you will need a separate computer window open to perform the instructions in Scratch. Alternatively, you can print out the modules and read through them on paper while following their instructions on the Scratch site.

GETTING STARTED WITH SCRATCH

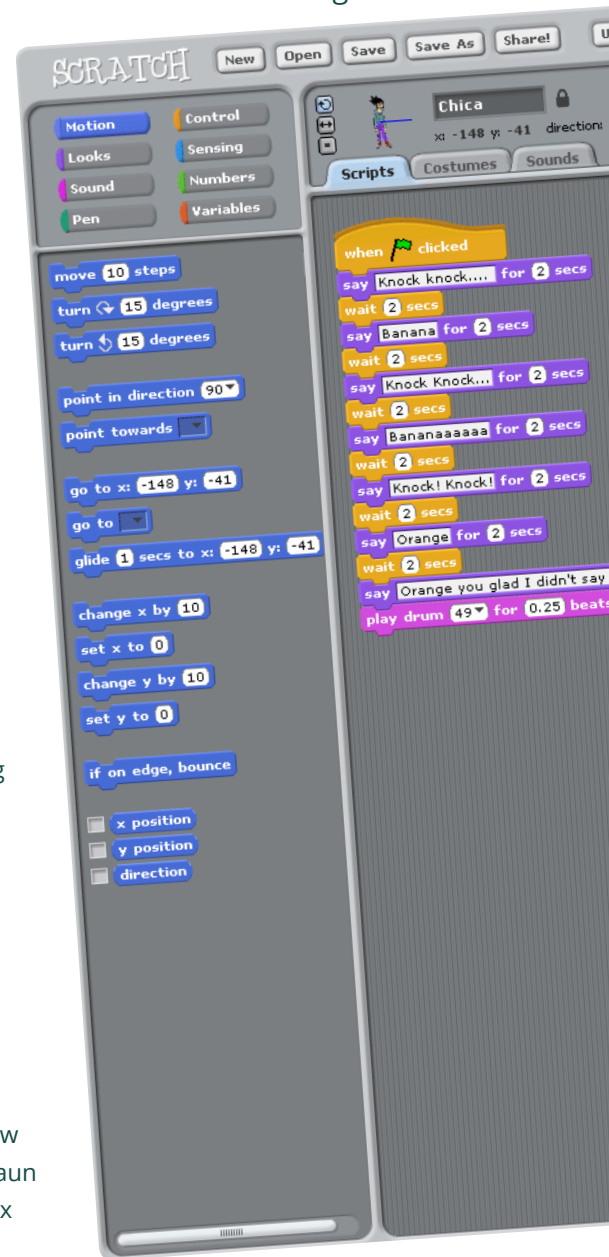
Scratch is a computer programming software that allows users to drag and drop commands rather than using a complex programming language, making it relatively easy to use and access.

The Scratch web site is www.scratch.mit.edu

- Use Scratch by accessing it on the Scratch web site or by downloading the programme onto your computer. Downloading the programme allows you to use it without an internet connection. (Make sure you download Scratch 2.0 – available here: <http://scratch.mit.edu/scratch2download/>)
- To start a project: On the Scratch home page, click Create to start a new project. You can also remix an already existing project, such as the Shaun the Sheep game example that Aardman created. To learn how to remix an existing game, see here:

http://wiki.scratch.mit.edu/wiki/Guide_to_Remixing

- To save your project, you need to first create a Scratch account and then sign in.
- To see 'under the hood' of any game and learn what codes the creators have used, click the blue 'See inside' button in the top right corner of the Scratch screen.
- If you're using a laptop, an external mouse might help younger children with the drag and drop functions of Scratch.



OTHER SCRATCH SUPPORT:

You're certain to have many questions about Scratch and need help as you build your game. There is a vast amount of help available, mostly through the Scratch community:

- Getting started with Scratch: <http://scratch.mit.edu/help/>
- Video tutorials: http://info.scratch.mit.edu/Video_Tutorials
- Glossary of terms: http://wiki.scratch.mit.edu/wiki/Scratch_Terms_Glossary
- Scratch wiki – information about different topics by 'Scratchers': http://wiki.scratch.mit.edu/wiki/Scratch_Wiki_Home
- Forum for Scratch users to ask questions: <http://scratch.mit.edu/discuss/>
- Forum for those new to Scratch: <http://scratch.mit.edu/discuss/6/>
- ScratchED: a useful online community of teachers using Scratch: <http://scratched.media.mit.edu/>

For those new to using Scratch - [Click here for a great introduction!](#)



WORKING TOGETHER AS A FAMILY

We hope this project brings families together to learn from each other and get creative over the summer. Collaboration can be brilliant fun, but it can also be challenging to find time to work together, share decision making and take on new roles. This may be especially true in this competition as children may know more about games, coding and Shaun the Sheep, providing a great chance for children to teach the adults in the family!

Below are some ideas on how to work together when building your game. Of course, every family will work differently so choose and use what works best for yours!

"This is a great opportunity for parents to learn about things that their kids will also be learning around computer coding. It's a whole new world to me and we can now approach it together."

- KATIE, PARENT



Keep everyone involved

Some of the technical coding activities may be difficult or less interesting for some, particularly younger children. Involve them in the more creative activities and roles in the project. Use other Shaun the Sheep resources if interest starts to dip! (See 'Things to do' on www.bbc.co.uk/cbbc/shows/shaun-the-sheep)

Take turns & listen to others' ideas

Use a 'talking stick' (or hat or special toy) when brainstorming to make sure everyone's ideas are listened to. When someone wants to speak or share an idea, they hold the object until they are finished. Everyone else must listen to the person holding the stick without interrupting. This is a great way to ensure that everyone has a chance to speak and both adults and children can be heard without interruption.

Make a plan

Depending on the age of the children working on the project, adults might want to read through the entire guide first and decide which activities are best suited for different family members.

ACTIVITY 1 - ROLE CARDS: KNOWING WHO DOES WHAT

Aim: To make sure that each person gets a turn doing different things and support fair, shared decision making.

These role cards set out different responsibilities involved in the process of game building. Print and cut out the Role Cards. Decide who will complete each role and make sure everyone understands their role. Create any new roles that you think might be useful. You might switch roles each time you work on the project or some people might decide they want to perfect one area of game building. Use the cards how it suits your family. However you use them, the cards can help ensure that everyone gets a turn and that there aren't too many fingers typing on the computer!

CHARACTER DESIGNER

You think about how the different characters would act, move and sound in the game you are creating. What choices would they make?



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PROGRAMMER/CODER

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DECISION MAKER

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GAME DESIGNER

You think about what happens in each level of the game and how it fits into the overall mission. Use the 'Design your game' and 'Design your levels' activities for help.



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Record questions that come up and try to answer them using Scratch forums, these resources or the Internet.



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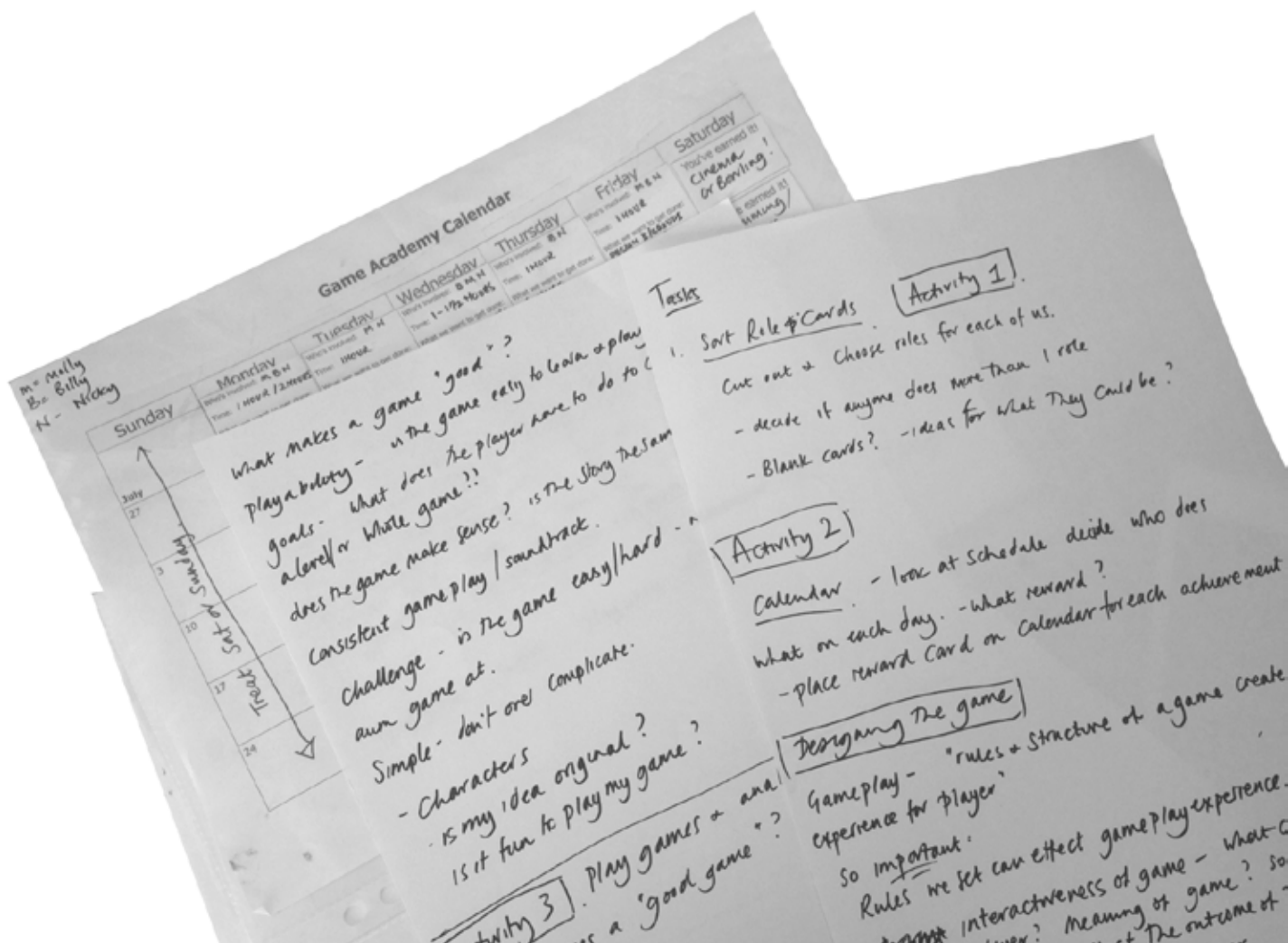


ACTIVITY 2 - CALENDAR: PLANNING YOUR GAME BUILDING

Aim: To create a game-building plan within family summer schedules.

As the competition only lasts 6 weeks (22 July – 1 September), this calendar provides a planning tool for setting aside times to work and organising the different activities, modules and tasks. The calendar below provides space for a week of planning. Print out six copies of this page and write in the dates, as well as who will be working on the game, when it will happen and what the focus will be. Include the activities in this guide and learning modules on the calendar. The 'You've Earned It' cards can be used as incentives for completing parts of the game. For example, you could agree on a fun trip at the end of each week if the planned work has been done.

See the next page for your own calendar!





SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
DATE	DATE	DATE	DATE	DATE	DATE	DATE
TIME	TIME	TIME	TIME	TIME	TIME	TIME
WHO'S INVOLVED	WHO'S INVOLVED	WHO'S INVOLVED	WHO'S INVOLVED	WHO'S INVOLVED	WHO'S INVOLVED	WHO'S INVOLVED
WHAT WE WANT TO GET DONE	WHAT WE WANT TO GET DONE	WHAT WE WANT TO GET DONE	WHAT WE WANT TO GET DONE	WHAT WE WANT TO GET DONE	WHAT WE WANT TO GET DONE	WHAT WE WANT TO GET DONE



YOU'VE EARNED IT!



YOU'VE EARNED IT!



YOU'VE EARNED IT!



YOU'VE EARNED IT!



2: DESIGNING A GAME

For those of you new to the world of game design, this section offers activities to get you thinking about what makes a good game, finding out more about Shaun the Sheep characters and starting to design your own game.

THINKING ABOUT GAME DESIGN:

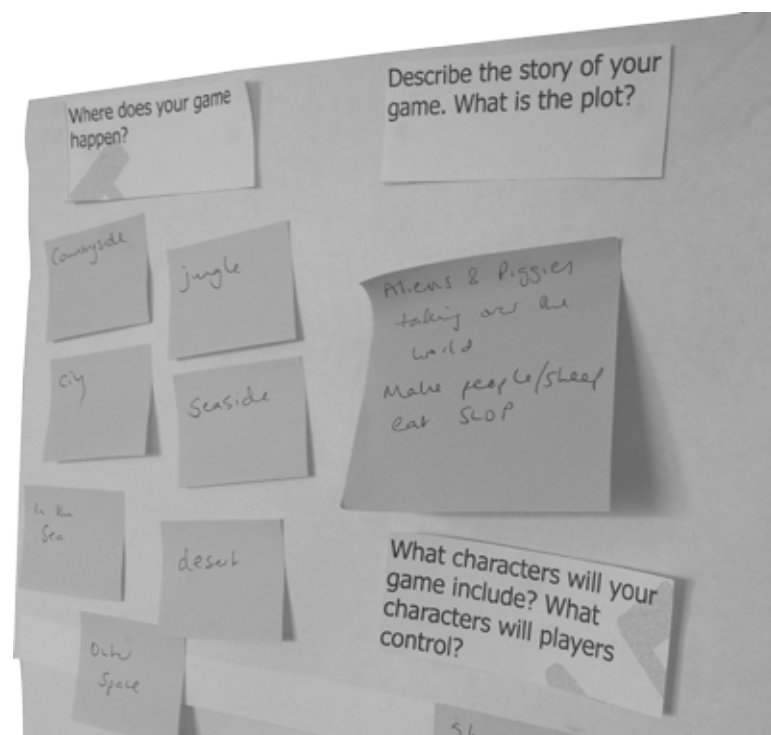
The main focus of game design is 'gameplay,' which is how the rules and structure of a game create an experience for players. Game design requires thinking about how the rules you set affect the experience of a player. A good way to do this is to play your game regularly as you build it to understand how the codes you use create a player experience.

There are many different types of games and while a game built in Scratch will not be as flashy or sophisticated as commercial games, Scratch offers a huge range of functionality to use for adventure games, mazes, platform games, puzzles and many more. For some inspiration about types of Scratch games, see here: http://wiki.scratch.mit.edu/wiki/Game_Projects

WHAT MAKES A GAME 'GOOD'?

There is a wide variety of opinions about what makes a game 'good'. Some characteristics of games that are often recognised as important include:

- *Playability* – Essentially how easy a game is to play
- *Feedback* – How well a game responds to a player's actions or progression
- *Goals* – How clear a game's aims and mission are to a player
- *Story or narrative* – Does the game make sense and stay true to its story?
- *Use of graphics and sound* – How interesting and consistent are these?
- *Challenge* – Are there challenges that stretch a player but are not impossible?
- *Simplicity* – Don't overcomplicate it!
- *Character development*
- *Originality of idea*
- *Pleasurable and fun to play*



ACTIVITY 3 - PLAY GAMES AND ANALYSE THEM

Aim: To consider what makes a game 'good' and experience what is possible in a Scratch game.

It's time to play some games! Print off a copy of the 'What Makes a Good Game?' sheet for each person. Each person should write criteria to use to judge a game, choosing from the list above or adding their own.

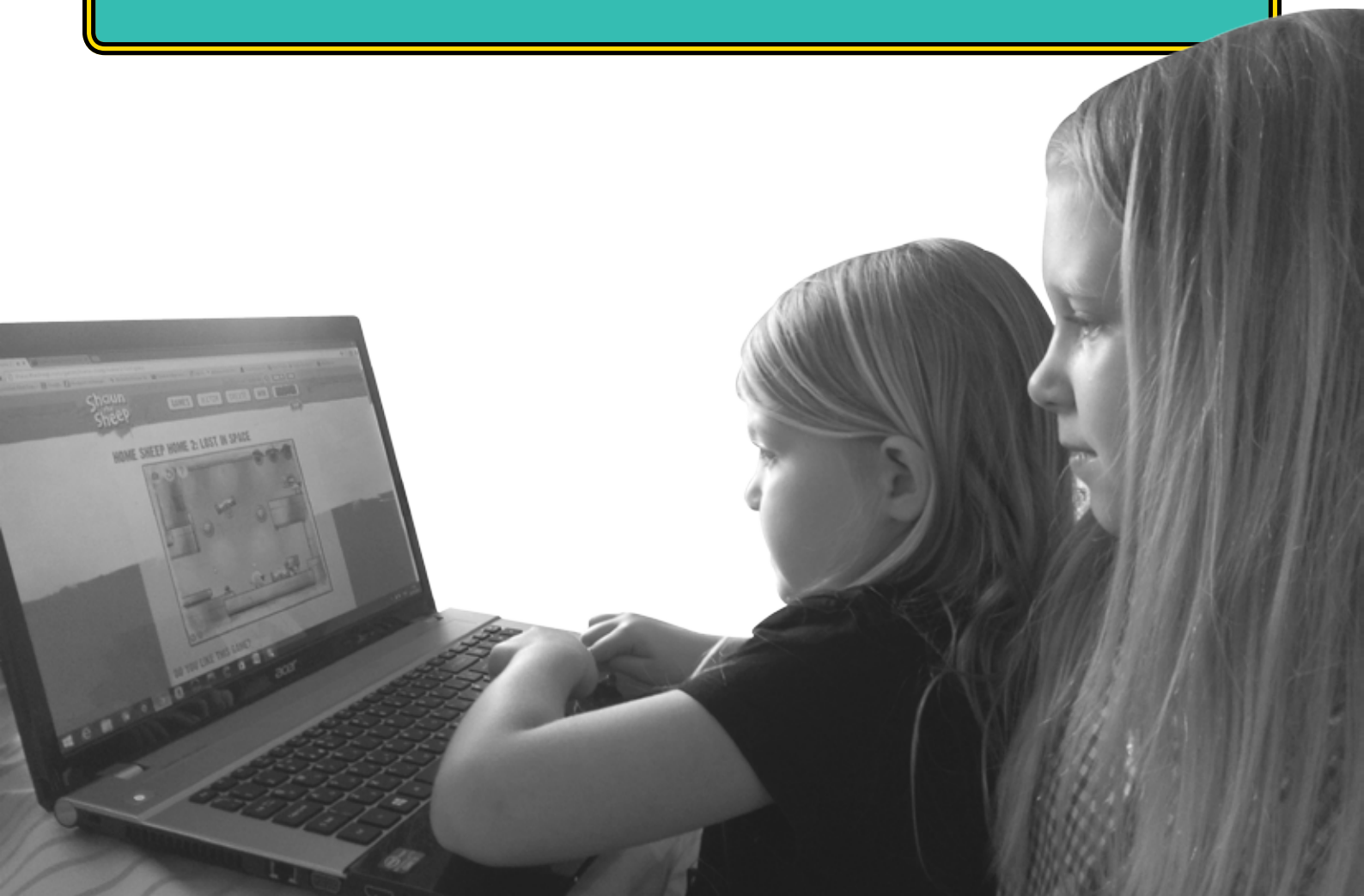
Play a game from the sites below or one of your own choice. Once you've played the game, score it against the criteria and note how you would have improved the game. Compare your answers with other family members. Then play more and determine which game your family thinks is the best!

Shaun the Sheep games: <http://www.shaunthesheep.com/games/>

Scratch games: <http://scratch.mit.edu/explore/>

Shaun's Game Academy entries: <http://shaunsgameacademy.co.uk/gallery.php>

- Including the example game that Aardman has built (<http://scratch.mit.edu/projects/21899025/>). You could remix this game instead of building a new one.



WHAT MAKES A GAME 'GOOD'?

Play your game and score it in the table below:

CRITERIA	SCORE (0-10)	WHAT WOULD YOU DO DIFFERENTLY?
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

ACTIVITY 4 - LEARN ABOUT SHAUN AND FRIENDS (AND ENEMIES!)

Aim: To learn about Shaun the Sheep characters that are available to use in your game.

Aardman Animations has made Shaun the Sheep characters available for use in your game – though you can also include other characters available in Scratch or design your own! The available Shaun the Sheep characters include:

- Shaun the Sheep
- Shirley the Sheep
- Other sheep in the flock
- A naughty pig
- An alien in a ship

To get to know the characters available for your game, spend some time watching them. Watch the videos below to decide what characters to use in your game and learn about their personalities. Pay attention to the backgrounds and sounds in the videos to get inspiration for your game.

Shaun the Sheep clips and videos:

<http://www.shaunthesheep.com/watch>

<http://www.bbc.co.uk/cbbc/shows/shaun-the-sheep>

The clips for 'Cat Got Your Brain,' 'Shaun Encounters,' and 'The Visitor,' include the character of the alien that Aardman has made available for use in your game, so these might be useful ones to watch.



ACTIVITY 5 - DESIGN YOUR GAME

Aim: To brainstorm the overall purpose and plan for your game.

Gather a big piece of paper, some pens and post-it notes (optional). Print out the questions on the next page, which are based on game design processes. Choose a card to start with and attach it to the paper. Discuss ideas for the game based on the question, writing them on post-it notes or on the paper next to the card. Continue with the other questions, building the story of your game as you go.

This activity is a good place to start thinking widely about different ideas. As you complete the other activities, learn Scratch and create your game, your plans will likely evolve. Return to the questions and your ideas as you build the game, perhaps by hanging the paper near where you'll work. You may not know if your ideas are realistic or what you want to do until you start to build and play your game.

WARNING! This activity may bring out some wild and wacky ideas for your game and its purpose is to get you thinking and working creatively. If you're worried that the ideas might not be possible in Scratch, don't throw them out yet! As you play more Scratch games and learn more about what is possible in the programme, you may find simple, creative ways to incorporate even the wildest ideas!

DESIGN YOUR GAME

Print out the cards below and attach your answers to a sheet of paper!

DESIGN YOUR GAME

Describe the story of your game.
What is the plot?

DESIGN YOUR GAME

Where does your game happen?

DESIGN YOUR GAME

What characters will your game include? What characters will players control?

DESIGN YOUR GAME

How do players feel when they are playing your game?

DESIGN YOUR GAME

What problems does the main character need to solve?

DESIGN YOUR GAME

What is your main character's mission (eg, to find, escape, collect or save something?)

DESIGN YOUR GAME

What sounds or music will your game include?

DESIGN YOUR GAME

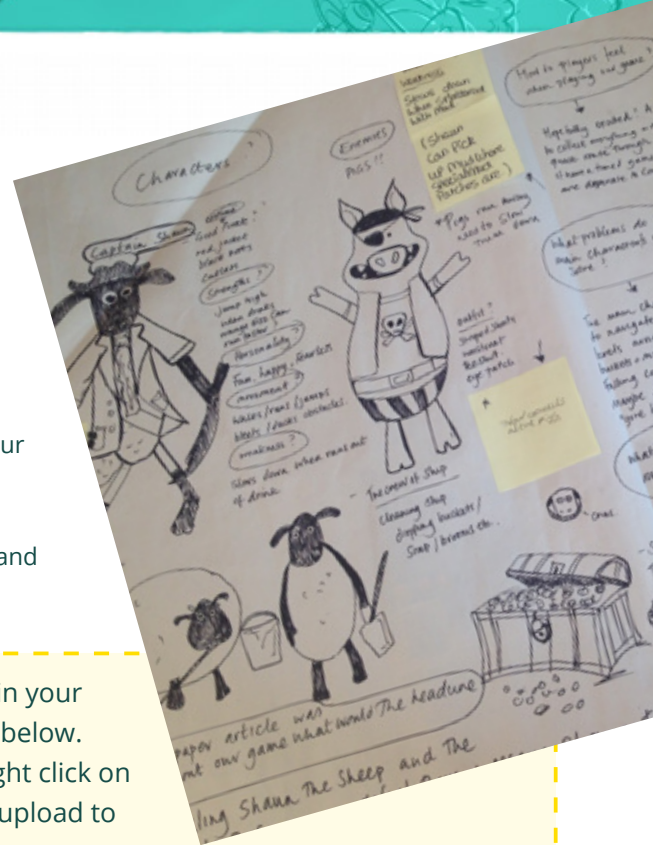
Can a player win the game? if yes, how?

2: DEVELOPING YOUR CHARACTER

Knowing and understanding the characters in your game is really important.

A character might be simple or have a more complex personality, but the activity and outcomes of a game rely on having a character that is well thought through and that players can relate to. Knowing and developing your characters will help you decide what story the game will tell.

This section will help you decide what characters to use, what they are like and what they do.



Top Tip: To use Shaun the Sheep and other Aardman characters in your game, download the 'sprites' (*characters in Scratch*) from the sites below. To download the sprites from these sites, click 'See inside', then right click on the image in the sprite library, choose 'Save to local file', and then upload to your own project.

For Shaun:

<http://scratch.mit.edu/projects/21899025/>

For the pigs, Shirley, sheep and alien:

<http://scratch.mit.edu/projects/22652434/>

And there are plenty more things from the Shaun universe you can use!

<http://scratch.mit.edu/users/ShawnsGameAcademy/projects/>

ACTIVITY 6 - DEVELOP YOUR CHARACTER/S

Aim: To choose Shaun the Sheep characters to use in your game and decide on their personalities, powers and journey through the game.

On pages 18-19 you will find pictures of the Shaun the Sheep characters available for use in the game, along with some prompt questions to help you think about character development.

- Print out the pages and cut out the characters and cards.
- Choose a character you might want in your game.
- Use the questions to help you think about how you can develop that character for your game.
- Record your ideas however you wish. You might put the character picture in the middle of a large piece of paper and jot down your responses to the prompt questions around the character.

You could also do this activity for your own characters you add to the game.

SHAUN



SHIRLEY



NAUGHTY PIG



OTHER SHEEP



ALIEN



CHARACTER DEVELOPMENT QUESTIONS

Print out the cards below and attach your answers to a sheet of paper!

OUTFIT/COSTUME

Does your character need a costume? If so, what is it? Is it a special colour?

TOOL/RESOURCES

What does your character need to help them with their mission? (eg a map, a rope, a magic carpet?)

MISSION

What is your character's main mission in your game? (eg saving, escaping or collecting something)

PERSONALITY

Describe your character's personality (eg happy, fearless, grumpy, caring)

RELATIONSHIP WITH YOUR CHARACTER

What do you like about your character? Anything you dislike?

STRENGTHS

What are your character's strengths? (these could be physical or emotional)

WEAKNESSES

What are your character's weaknesses? (these could be physical or emotional)

SPECIAL POWERS

Does your character have special powers? If so, what are they?

ENEMIES

Does your character have any enemies in your game? Are there any baddies?

MOVEMENT

How does your character move, walk, speak?

4: DESIGNING YOUR GAME LEVELS

Once you have a sense of the overall design of your game, what qualities it should have to make it a 'good' one, and an idea of what characters are involved, you can start to plan out your levels. You might have a game with just one level that can be played over and over or you could create a game with many levels that show different challenges and get progressively harder, as in a platform game. For a game that uses progression, players should build on skills they've already learned and gain new skills in each level.

One of the most important things to do when building a game is to play it as you build. This 'iterative design' allows you to change things based on your playing experience, which is likely to be very different than the way you planned it. So test as you build and experience as you experiment! It can also be useful to ask others not involved in building the game to play it and give you feedback.

The following activity will help you consider what to include in each level and how to make sure it fits in with the overall design of your game.

Top Tip: Test out your game as you build it by using the 'What Makes a Good Game?' activity and assessing your own game against the criteria you think is important.

ACTIVITY 7 - DEVELOP YOUR LEVELS

Aim: To plan and develop different levels of your game, keeping in mind your characters, overall plot and player experience.

Print out a copy of the Level Planning activity sheet (which is on the next page) for each game level you create. Work together to answer the questions through discussion or by first individually writing down ideas on post-it notes or pieces of paper and then talking through the different ideas.

Once you have planned your levels, ask yourself the following questions for each one to make sure that what you have planned is realistic, feasible and consistent with your game plan!

- How does this level build on previous levels? What does it add that is new?
- How are characters developed in this level? Are they consistent to previous levels?
- How does the story play out in this level?
- Is this possible to complete this using Scratch? Do you know how to do it or how to find out how to do it?

GAME LEVEL PLAN - LEVEL:

