Steps in a simple card game

Choose a simple card game and create a flowchart that describes the steps and decisions you make that enable you to successfully play the game.

1 HOUR+	MEDIUM	AGES 8+
ACTIVITY TYPE: GAME AND WRITTEN TASK		

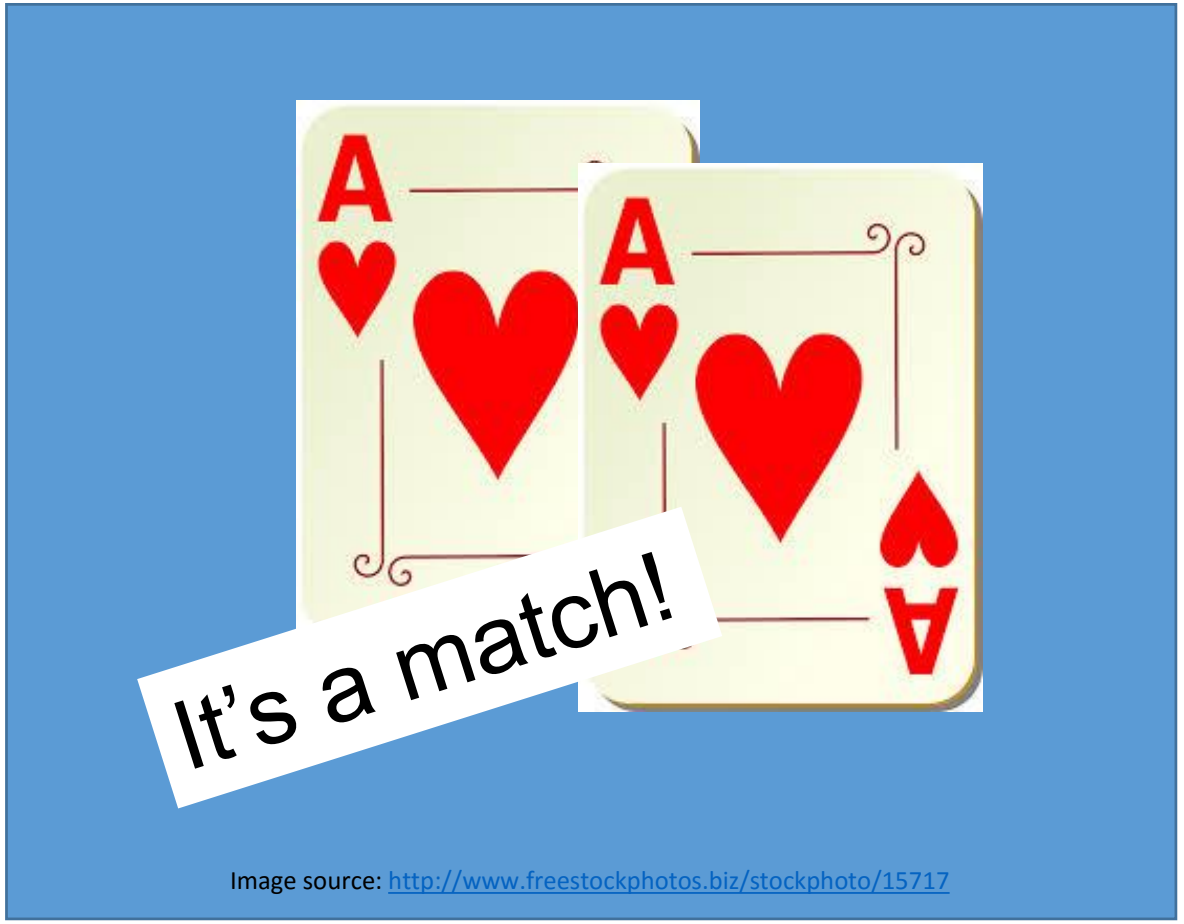

Image source: http://www.freestockphotos.biz/stockphoto/15717

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You will need …

- Deck of cards
- Paper
- Pencils

Optional: Computer with Microsoft Word or internet access

Image source: https://pxhere.com/en/photo/810270

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About the activity

Your child will describe the sequence of steps and decisions needed to successfully play a simple card game such as Snap.

Your child will use a flowchart to show the order of events in a game and the decisions that a player must make.

Image source: DT Hub

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Flowchart: What's that?

A flowchart is a type of diagram that shows steps in a process that you would follow.

Each of the steps is connected by an arrow, directing you to the next step in the diagram.

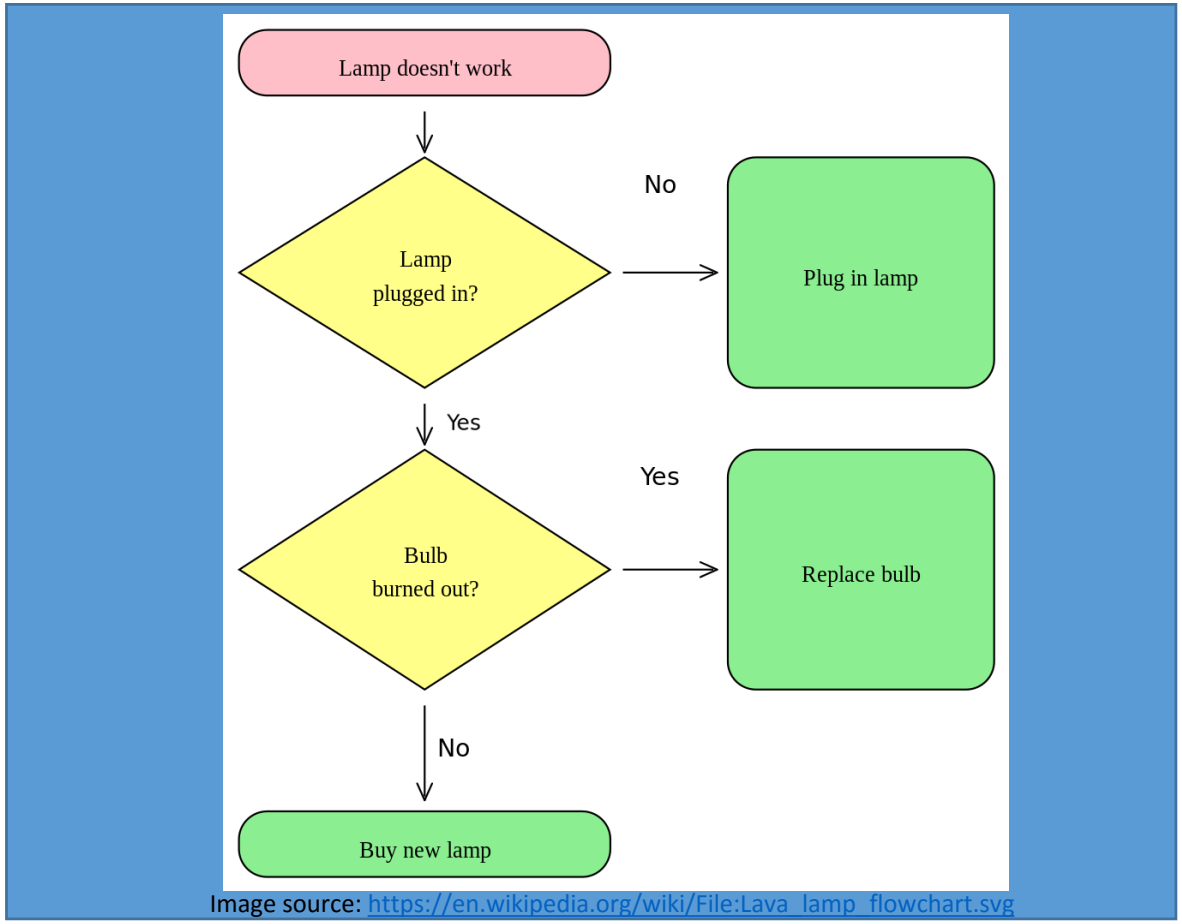

Image source: https://en.wikipedia.org/wiki/File:Lava_lamp_flowchart.svg

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1 Let’s get started

Play a simple card game with your child; for example, Snap, Go Fish, Old Maid or Piggy.

Tip: Read instructions for how to play these games.

Image source: https://www.flickr.com/photos/vastateparksstaff/15791658397

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2 What's next?

Discuss the steps (process) taken to play the chosen game with your child.

Questions could include:

- Who goes first? How is this decided?
- How does someone win?
- What decisions do you need to make throughout the game?

Image source: https://pixabay.com/en/direction-decision-decisions-1015716/

Tip: Note some of these ideas throughout the brainstorm.

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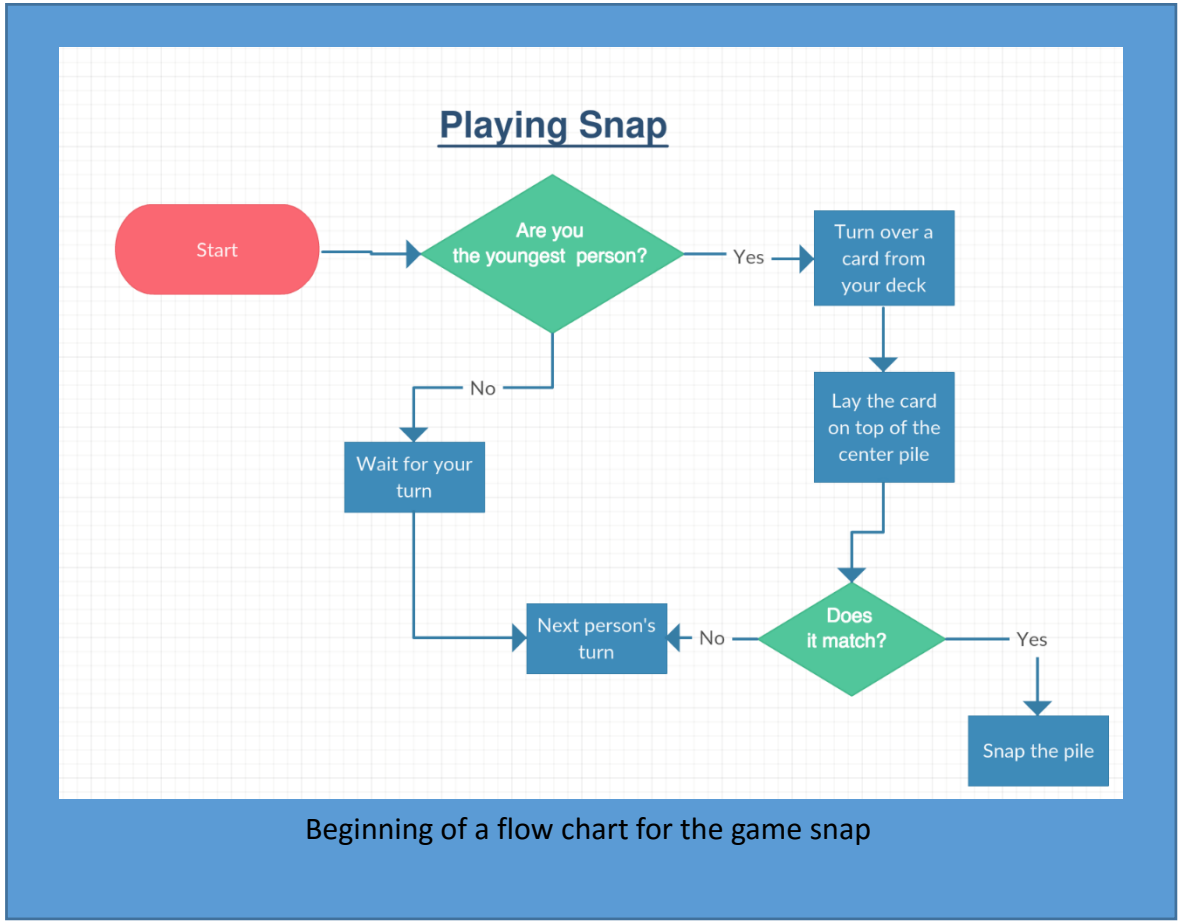
3 What's next?

Using your knowledge of the game and the information discussed in Step 2, create a flowchart that illustrates the steps and decisions required throughout the game.

Tip: You could use a pen and paper for this activity. Alternatively, you could try a flowchart creator in Microsoft Word, or an online program such as Creately: https://creately.com



Beginning of a flow chart for the game snap

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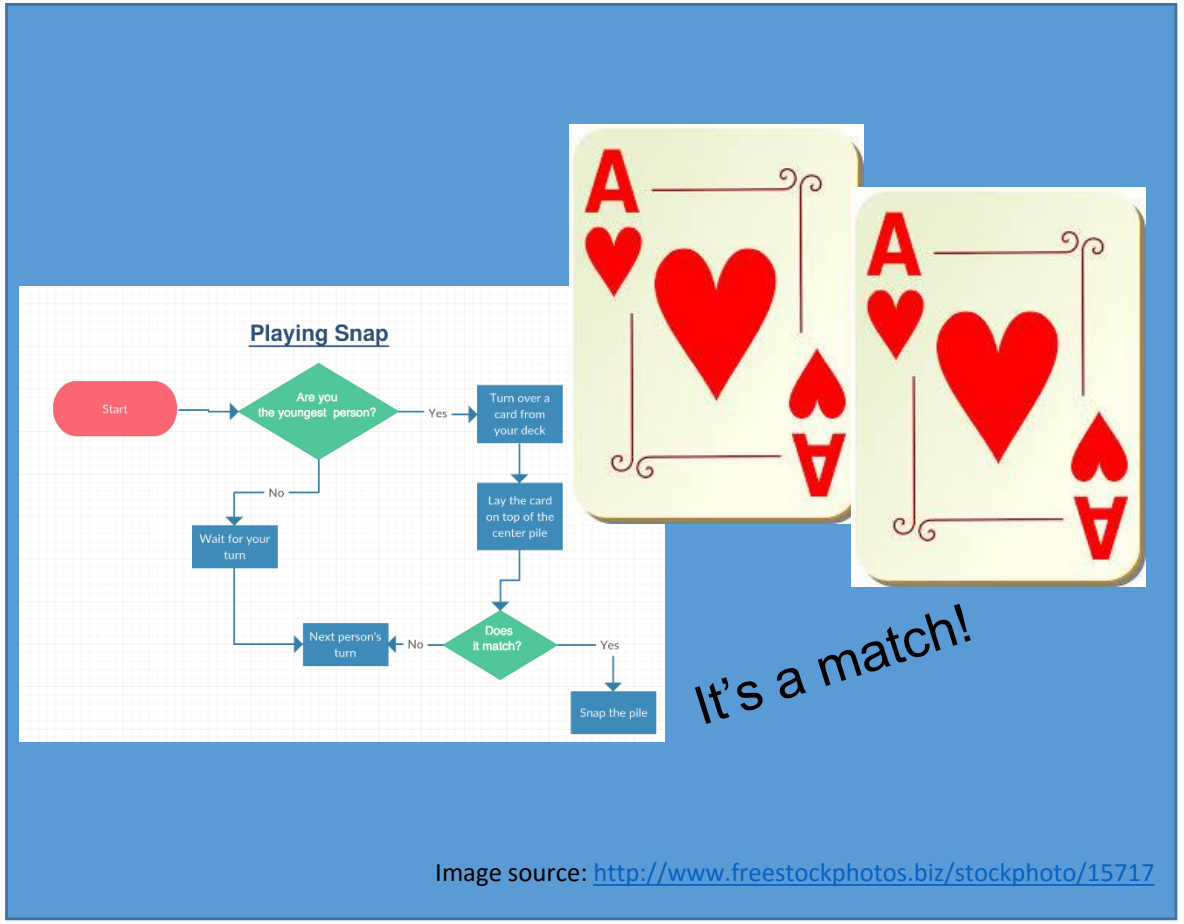
4 Congratulations!

Play your chosen game again in slow motion with the flowchart beside you.

When you make each step or decision, check that it matches the steps and decisions in your flowchart.

Tip: It is okay to change your flowchart, especially if you notice that an instruction is incorrect or you missed a step.



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Why we are learning about this

Computational thinking requires decisions to be made. It allows actions to be changed, based on the input of data.

An algorithm is a series of ordered steps required for solving a problem. Algorithms may be described either diagrammatically or in structured English.

Flowcharts are a good way to help children represent algorithms involving branching (decisions). Branching involves making a decision between one of two or more actions, depending on sets of conditions and the data being input.

Find out more: https://www.digitaltechnologieshub.edu.au/teachers/topics/algorithms

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