1) A book cost £7.50. A pencil cost £0.89.
A) How much would it cost for 1 book and two pencils?
B) How much change would you get from £10.00?

2) A cake was cut into 10 slices. 3 slices were eaten at 2pm and a further 2 at 4pm. How many slices are left? Write the amount as a fraction, decimal and percentage.

3) How many days in total are in the months September, October and December?

4) A bag of flour weighs 1kg. A cake mix needs 345g. How much flour is needed for 2 cakes? Write your answer in g and kg.

5) There were 17 pencils in a box. If I had 6 boxes, how many pencils are there in total?
A box costs the school £3.49, how much do 6 boxes cost?

Maths Warm Up

1. $4^3 - 3^2 =$
2. Write 27/100 as a decimal
3. Round 167 to the nearest 10 and nearest 100.
4. Convert 0.75Kg into grams
5. A rectangle measures 2cm x 6cm. What is its perimeter?

Maths Paper 3

9:20-10:00

Monday 22nd June
TBAT: use comparative conjunctions to link sentences.

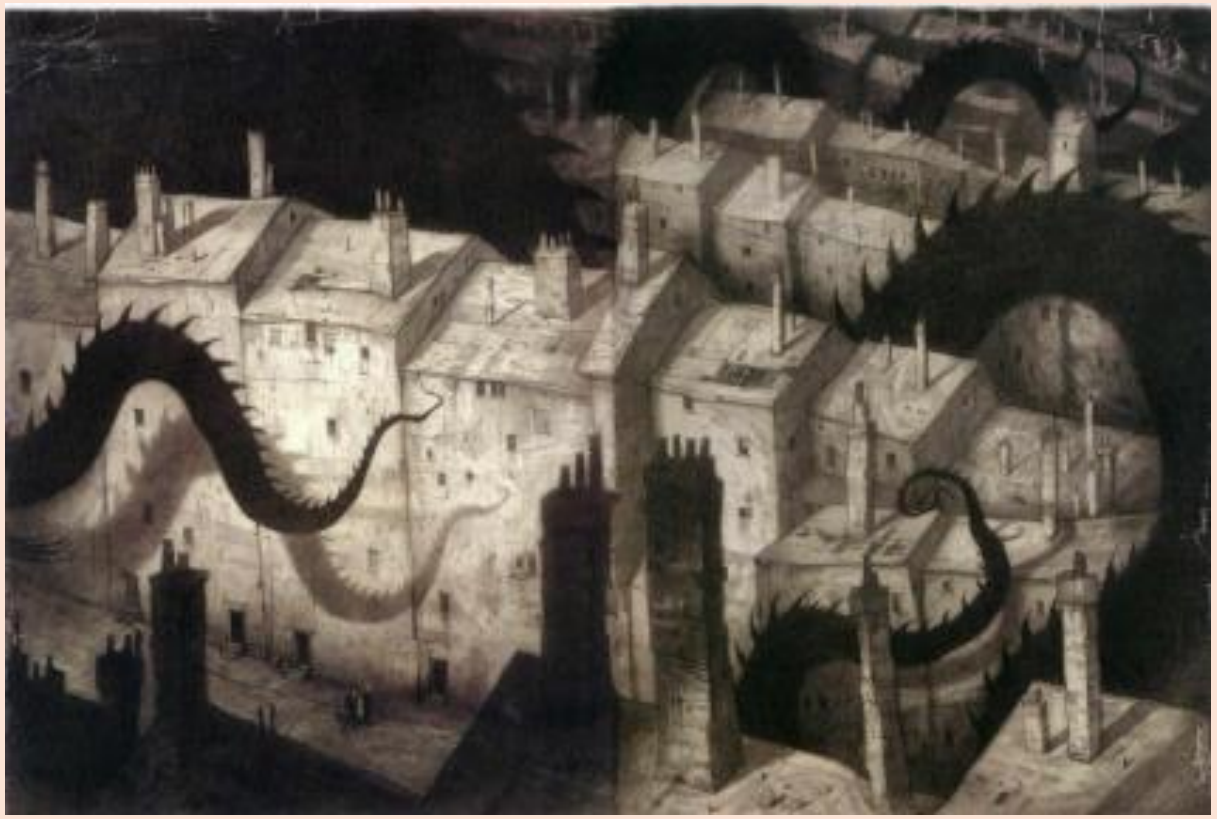
3 in 3

1. Write a sentence with a capital letter and full stop

2. Circle the verb in this sentence:
The creature moved slowly.

3. Add a comma to this sentence: "In the morning the man packed his bag."

TBAT: use comparative conjunctions to link sentences.



Why do you think the man is leaving the dark city?
What clues in the picture show that life there might be difficult?
Why might he feel hopeful about the new city?
How are the two places different?

TBAT: use comparative conjunctions to link sentences.

What is the purpose of the conjunctions below?

whereas

Although

However

on the other hand

shows contrast *introduces a contrasting idea* *shows something surprising* *shows the opposite viewpoint*

Try using the conjunctions in a sentence.

TBAT: use comparative conjunctions to link sentences.

*The dark city looks cramped and polluted, **whereas** the new city looks bright and open.*

Although the man looks nervous, he also seems hopeful about starting a new life.

*The old city is full of smoke and shadows; **however**, the new city feels clean and welcoming.*

*The dark city feels dangerous; **on the other hand**, the new city feels safe and peaceful.*

shows contrast *introduces a contrasting idea* *shows something surprising* *shows the opposite viewpoint*

What do you notice about the punctuation?

TBAT: use comparative conjunctions to link sentences.

Talk partners:

Each sentence uses the wrong conjunction. Replace it with the correct one.

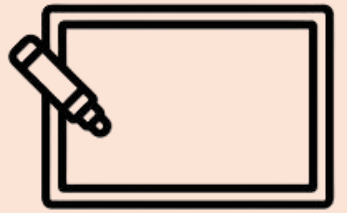
*The new city is bright, **because** the old city is dark.*

*The man is scared; **and**, he keeps walking.*

*The old city is dangerous, **so** the new city feels safe.*

whereas **although** **however**

TBAT: use comparative conjunctions to link sentences.



Whiteboards- Complete the sentences:

The dark city looks frightening, ***whereas*** *…*

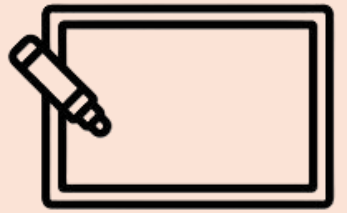
Although the man is leaving everything behind, …

The new city looks bright; ***however****, …*

The old city seems unfriendly; ***on the other hand****, …*

dark, smoky, cramped, lonely, bright, hopeful, clean, busy, peaceful

TBAT: use comparative conjunctions to link sentences.



Knowledge checkpoint:

Which conjunction fits best?

The new city looks bright, _____ the old city looks gloomy.

A. although
B. because
C. whereas
D. so

TBAT: use comparative conjunctions to link sentences.

Write a paragraph comparing the dark city the man is leaving with the bright city he is travelling to.

You must use at least **three** comparative conjunctions:

- **whereas**
- **although**
- **however**
- **on the other hand**

Model:

*The dark city is full of smoke and tall, cramped buildings, **whereas** the new city looks bright and open. The man seems sad to leave his home, **although** he knows he must find a safer place. The old city feels cold and unfriendly; **on the other hand**, the new city seems warm and welcoming.*

Learning Objective

To develop throwing with greater control and technique.

Success Criteria

- Begin your throw in a balanced stance.
- Point the javelin tip slightly up.
- Transfer your weight from your back to your front leg.

Whole Child Objectives

Social: To work with my group to ensure that we are ready for the activity.

Emotional: To work to my personal best.

Thinking: To explore using a run up in the javelin throw and identify the effect this has on the distance I achieve.

What is puberty?

What does puberty mean? Write down your own ideas.
Now talk to your partner. Share your ideas with the class.

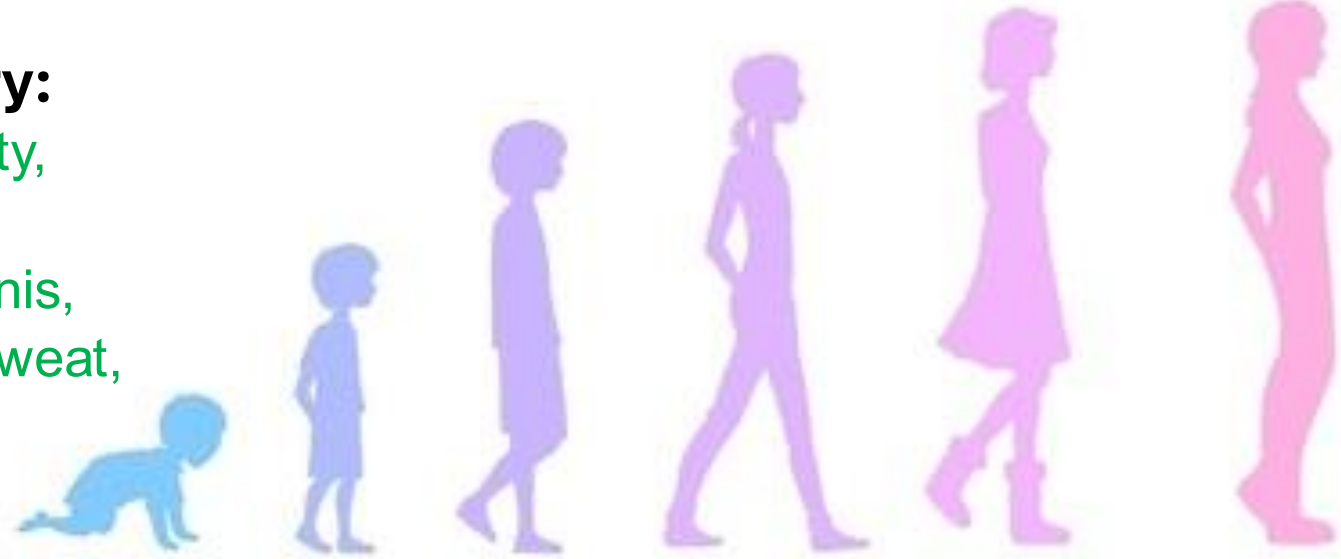
Our key question: What is puberty?

By the end of this lesson, you will:

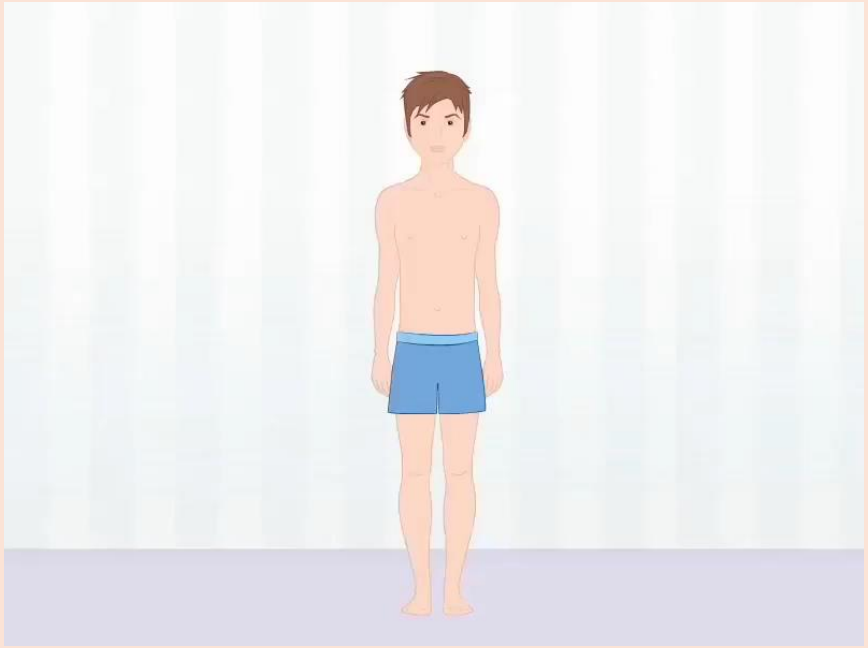
- **Know** the physical changes during puberty
- Have **discussed** how to stay clean and hygienic during puberty
- **Know** where to seek support for advice about puberty

Key vocabulary:

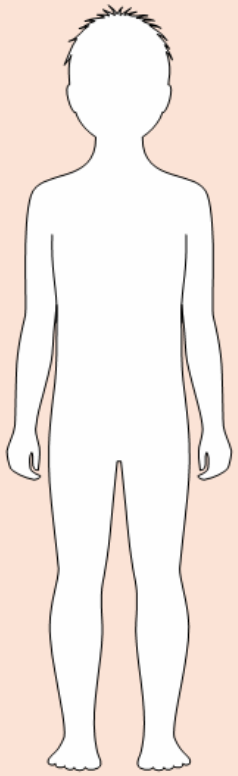
hormones, puberty, testicles, womb, vagina, vulva, penis, clean, bacteria, sweat, body odour

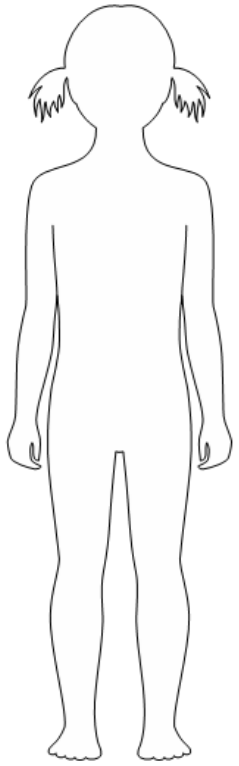


Changes during puberty



Physical changes in puberty





Your task

Working in groups.
Draw a male and a female body outline.
Using what you learnt from the clips, annotate the outlines to show what physical changes happen to the body during puberty.
You can also use the puberty bag to help you!

How to keep clean

What parts of your body need to be cleaned every day?
What products might you use to clean them?

In groups, annotate your body outlines with pictures or words to show what products you would use to clean that body part – and how often you think it needs to be cleaned.

For example: teeth – toothpaste, toothbrush – two to three times a day

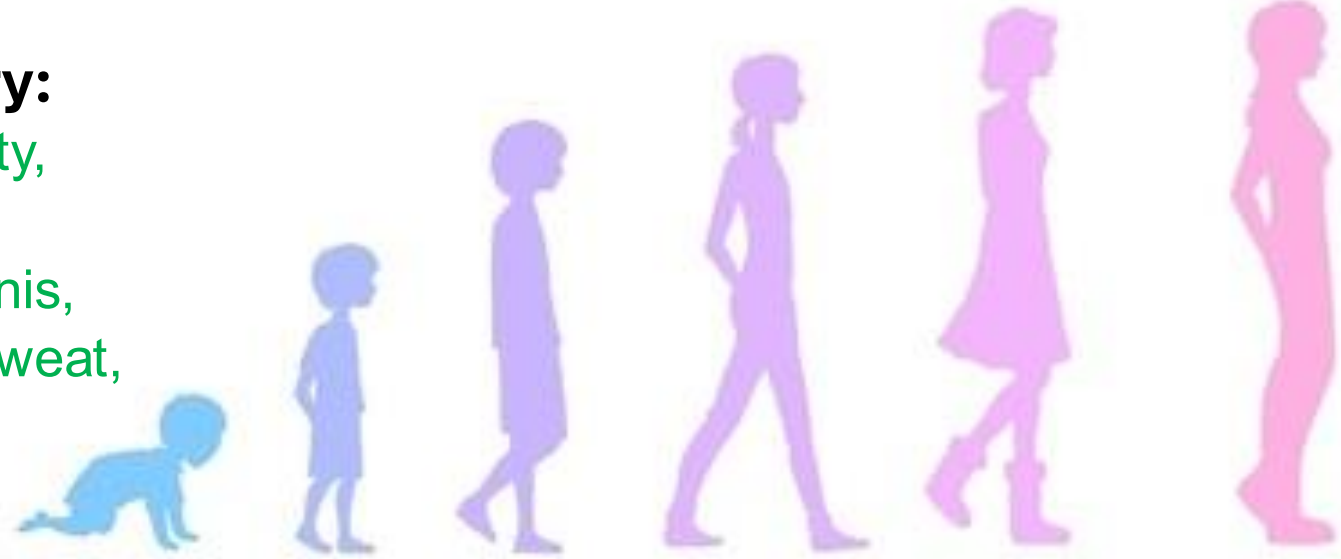
Our key question: What is puberty?

By the end of this lesson, you will:

- **Know** the physical changes during puberty
- Have **discussed** how to stay clean and hygienic during puberty
- **Know** where to seek support for advice about puberty

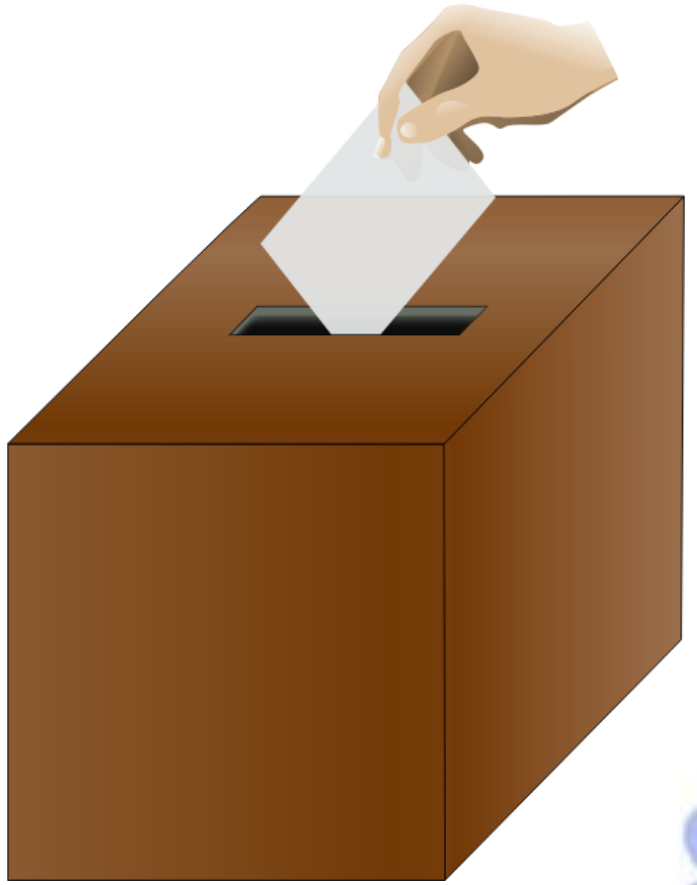
Key vocabulary:

hormones, puberty, testicles, womb, vagina, vulva, penis, clean, bacteria, sweat, body odour



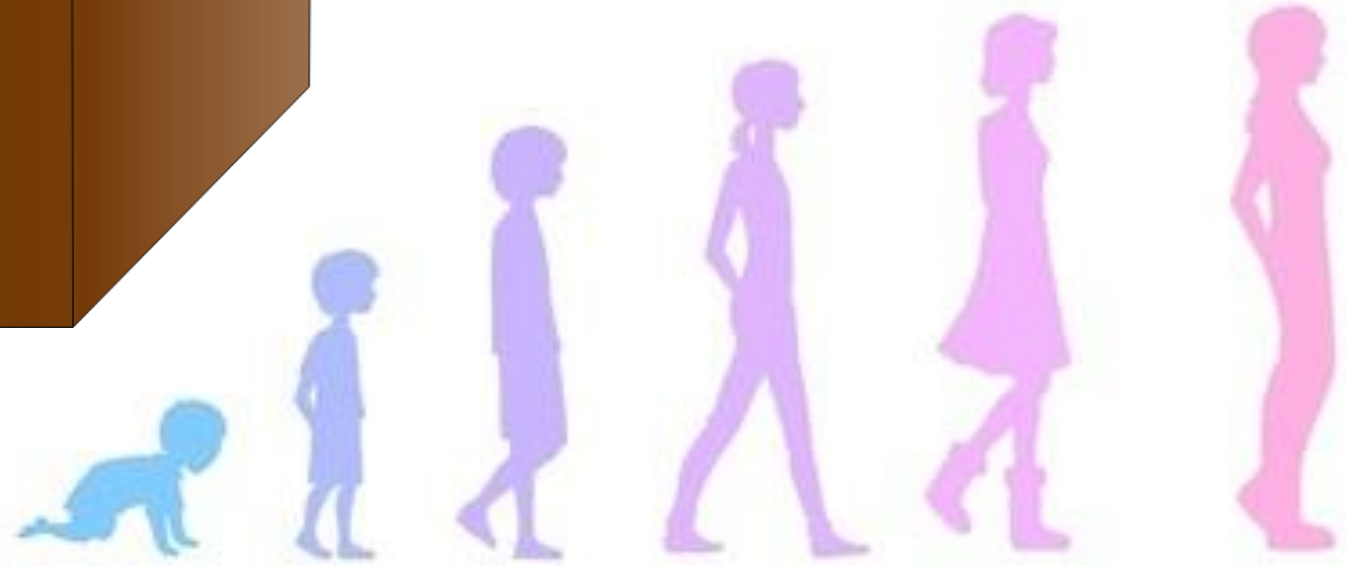
[OAT]
Ormiston Academies Trust
ACHIEVING MORE TOGETHER

What questions do you have?



We want to make sure that you have any questions you have about puberty answered.

If you have any questions you would like to ask, then put them into the anonymous question box.



[OAT]
Ormiston Academies Trust
ACHIEVING MORE TOGETHER

Seeking support

If you have questions or concerns about today's lesson, you can always speak to:

- Your parent or carer
- Your tutor
- Your Head of Year
- A member of the school safeguarding team

YOUNGMiNDS

NSPCC

allsorts youth project

childline

ONLINE, ON THE PHONE, ANYTIME

childline.org.uk | 0800 1111

Monday 22nd June

TBAT: design a program that uses selection.

1 What is a condition in Scratch programming? (Tick **1** correct answer)

- ☐ a type of sprite
- ☐ a statement that can be True or False
- ☐ a background image
- ☐ a sound effect

2 What word means choosing between actions in a program?

_____

3 What is the result called when a program checks a condition?

_____

Monday 22nd June

TBAT: design a program that uses selection.

1 What is a condition in Scratch programming? (Tick **1** correct answer)

- [ ] a type of sprite
- [x] a statement that can be True or False
- [ ] a background image
- [ ] a sound effect

2 What word means choosing between actions in a program?

selection

3 What is the result called when a program checks a condition?

outcome

Keywords

input	in a program, the text or numbers that a user types in
branching algorithm	a decision-making flow used to plan a program with a condition and two outcomes

What is a quiz?

Andeep

A quiz is like a mini game with questions.

You try to get as many questions right as you can!

Sam

Mind map ideas for a quiz

Explanation

In this lesson, you will be:

- gathering and recording ideas for a quiz
- creating **branching algorithms** for the quiz
- planning outcomes for a Scratch quiz

Mind map ideas for a quiz

Explanation

To create a quiz, you will need:

- a topic
- questions
- answers

Mind map ideas for a quiz

Explanation

What topic would you like your quiz to be about?

Aisha

The solar system.

Capital cities.

Andeep

Jacob

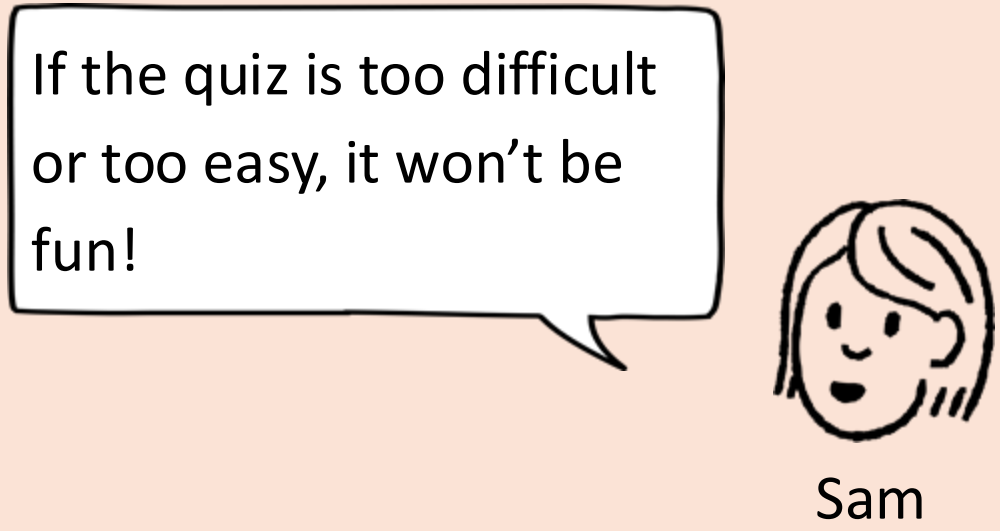
A times tables quiz.

Mind map ideas for a quiz

Explanation

When designing a quiz, it's important to think about your audience.

You need to think about who will be playing your quiz, what kinds of topics they enjoy and how difficult the quiz will be.



Check

Fill in the blanks:

A quiz is a game with questions and answers

A quiz needs an interesting topic that people will enjoy. If your quiz is too difficult or too easy, it won't be fun.

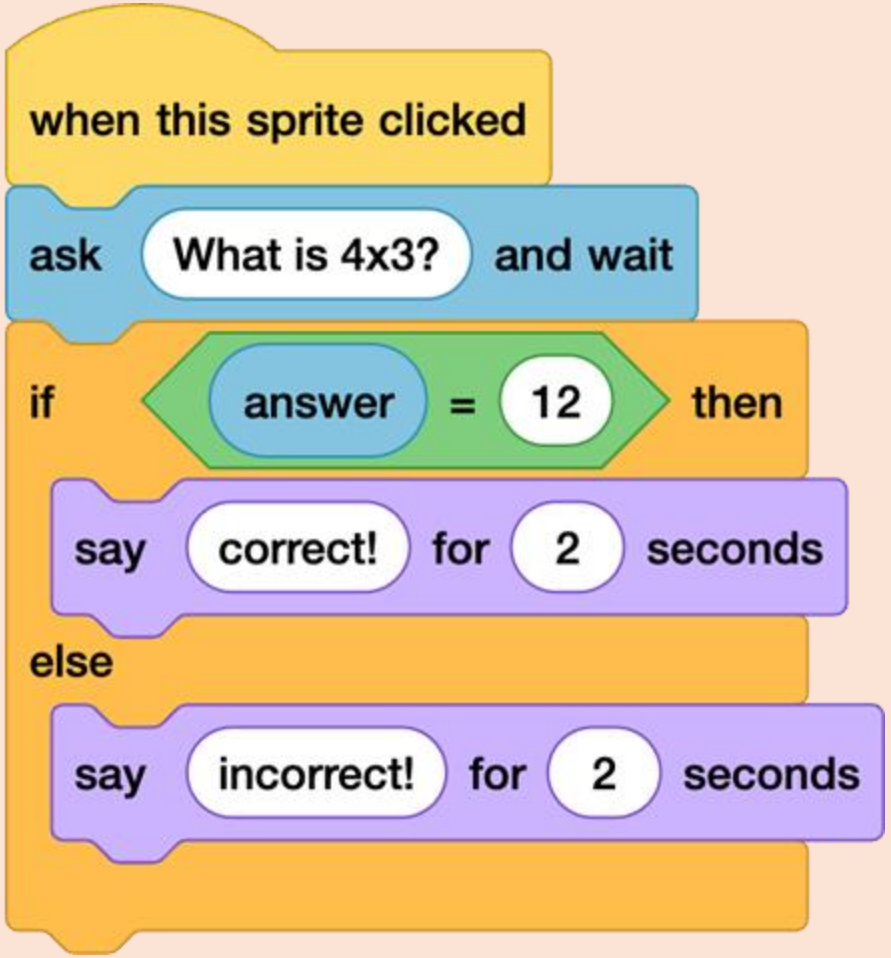
difficult	answers	topic

Mind map ideas for a quiz

Explanation

Your questions will need to work in a Scratch ask and answer block.

This means that they must have one exact answer. It will be easier to make your quiz if your answers are True or False, a single word or number, or Yes or No.



Scratch is a project of the Scratch Foundation. It is available for free at https://scratch.org.

Mind map ideas for a quiz

Explanation

Even though coding in Scratch is the final goal, you don’t need to do any programming in this lesson.

You are only recording your ideas at this stage.

Mind map ideas for a quiz

Check

Which questions will be more difficult to program?

a Describe what it would be like to stand on Jupiter. ✓

b Is Mercury the hottest planet in the solar system?

c True or False? Neptune is larger than Saturn.

d List the planets in order from the Sun. ✓

Mind map ideas for a quiz

Check

A does not have one single correct answer.

a Describe what it would be like to stand on Jupiter. ✓

b Is Mercury the hottest planet in the solar system?

c True or False? Neptune is larger than Saturn.

d List the planets in order from the Sun. ✓

Task A

Mind map ideas for a quiz

Practice

1) Gather ideas for your quiz:

- Choose a topic.
- Write down five possible questions you could use in your quiz.
- How could you use Scratch to show your topic?

2) Share your mind map with others:

- Can you think of any more ideas?
- Can you see any questions that might not work?

1) Gather ideas for your quiz:

Topic: the solar system

Q1: True or False? Jupiter is the largest planet.
Q2: The third planet from the sun is …?
Q3: Is Mercury the hottest planet in the solar system?
Q4: How many planets are there in the solar system?
Q5: True or False? Neptune is larger than Saturn.

Scratch ideas: Use a space backdrop.
Have planet or rocket sprites.

Andeep

Planning sometimes feels like a waste of time! It would be faster to just start coding right away.

Why is it useful to spend time planning a coding project?

Planning your quiz is like drawing a map before you go on a trip. If you don’t know where you're going, it’s easy to get lost.

Aisha

A clear plan helps your coding go faster and with fewer mistakes, because you already know what your code is supposed to do.

Sam

The next step is to plan what happens in your quiz using selection.

Jacob

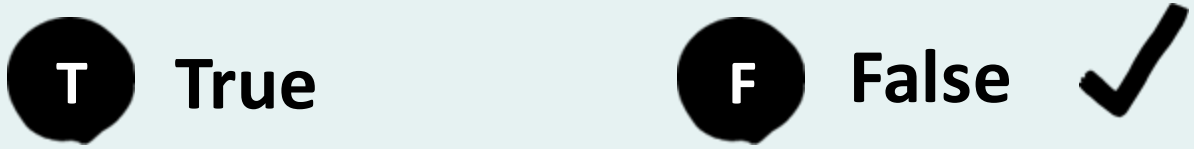
What is selection?

Selection is part of a program where if a condition is met, then a set of commands is run.

Sam

True or false?

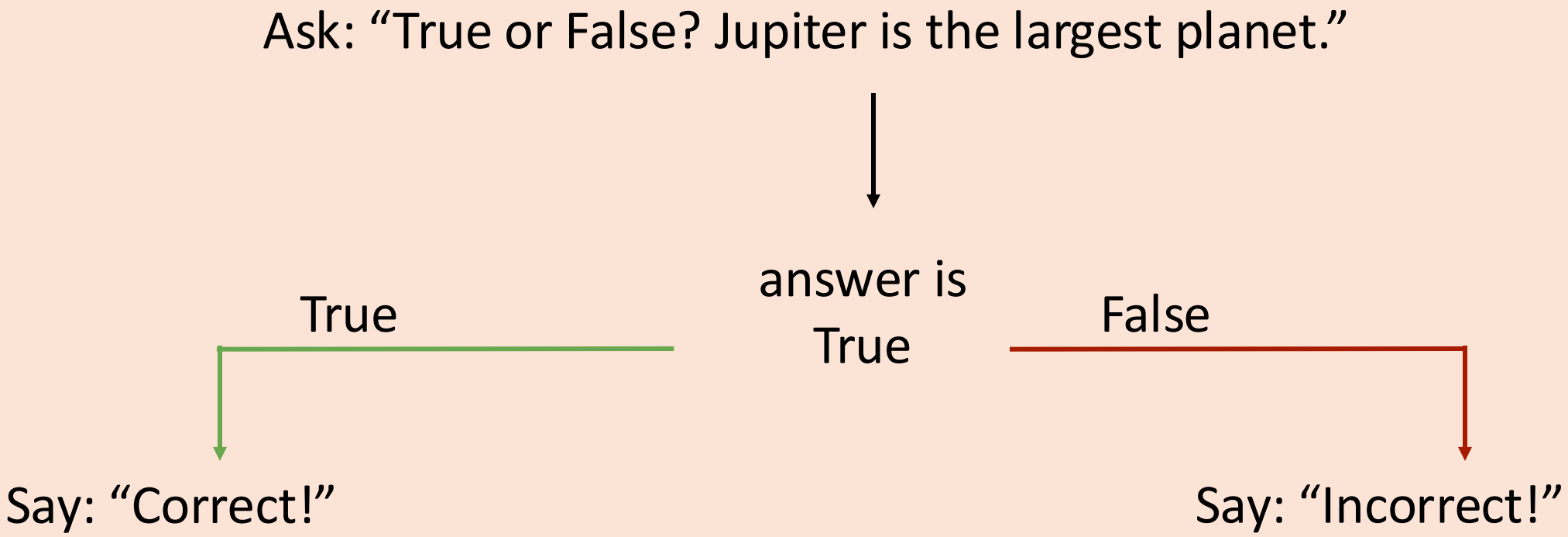
Planning a quiz is wasting your time.



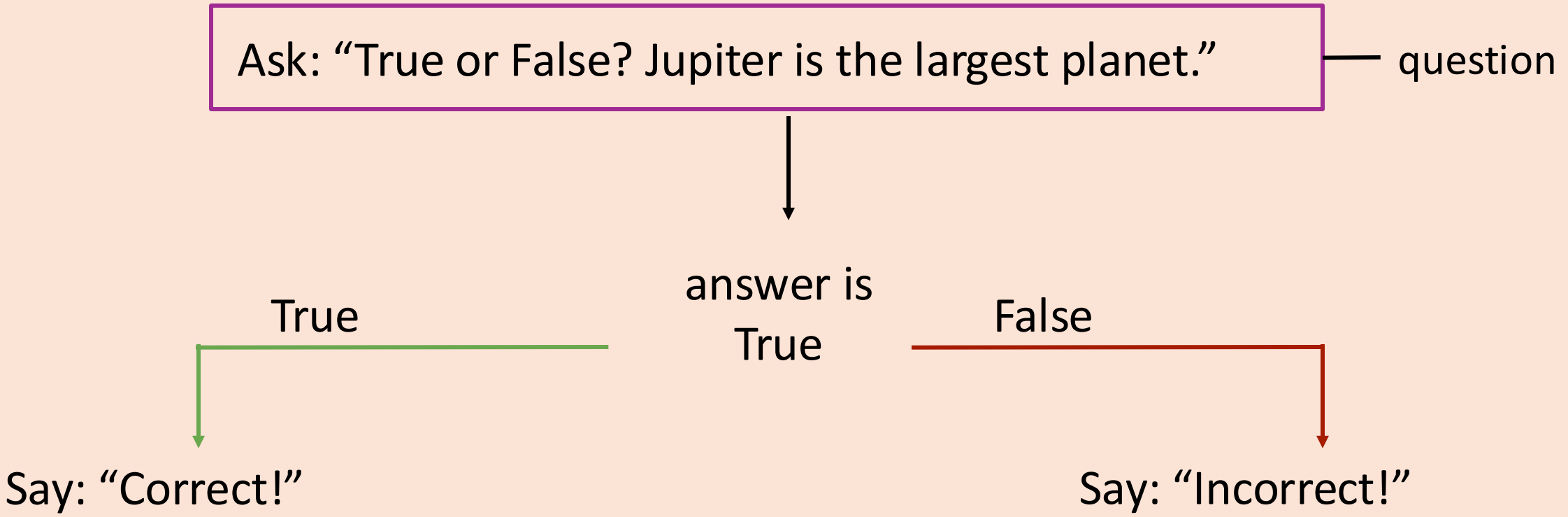
Why?

A clear plan helps your coding go faster and with fewer mistakes, because you already know what your code is supposed to do.

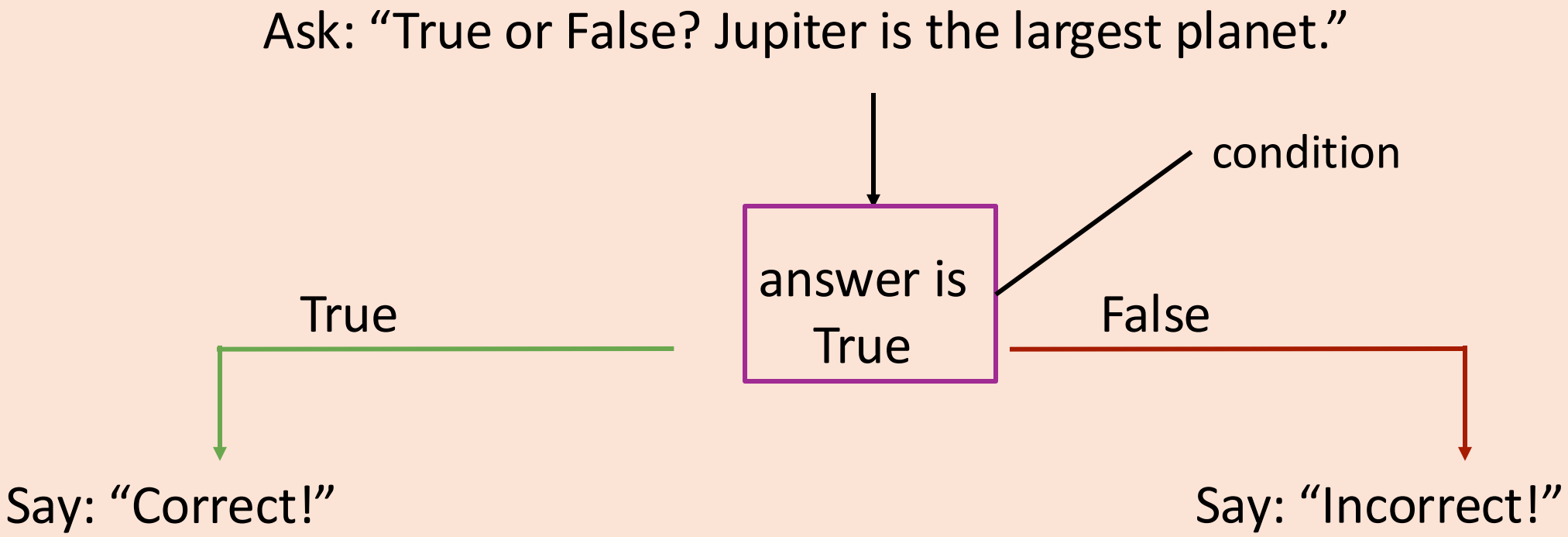
Look at this example of a **branching algorithm**.



This is the question.

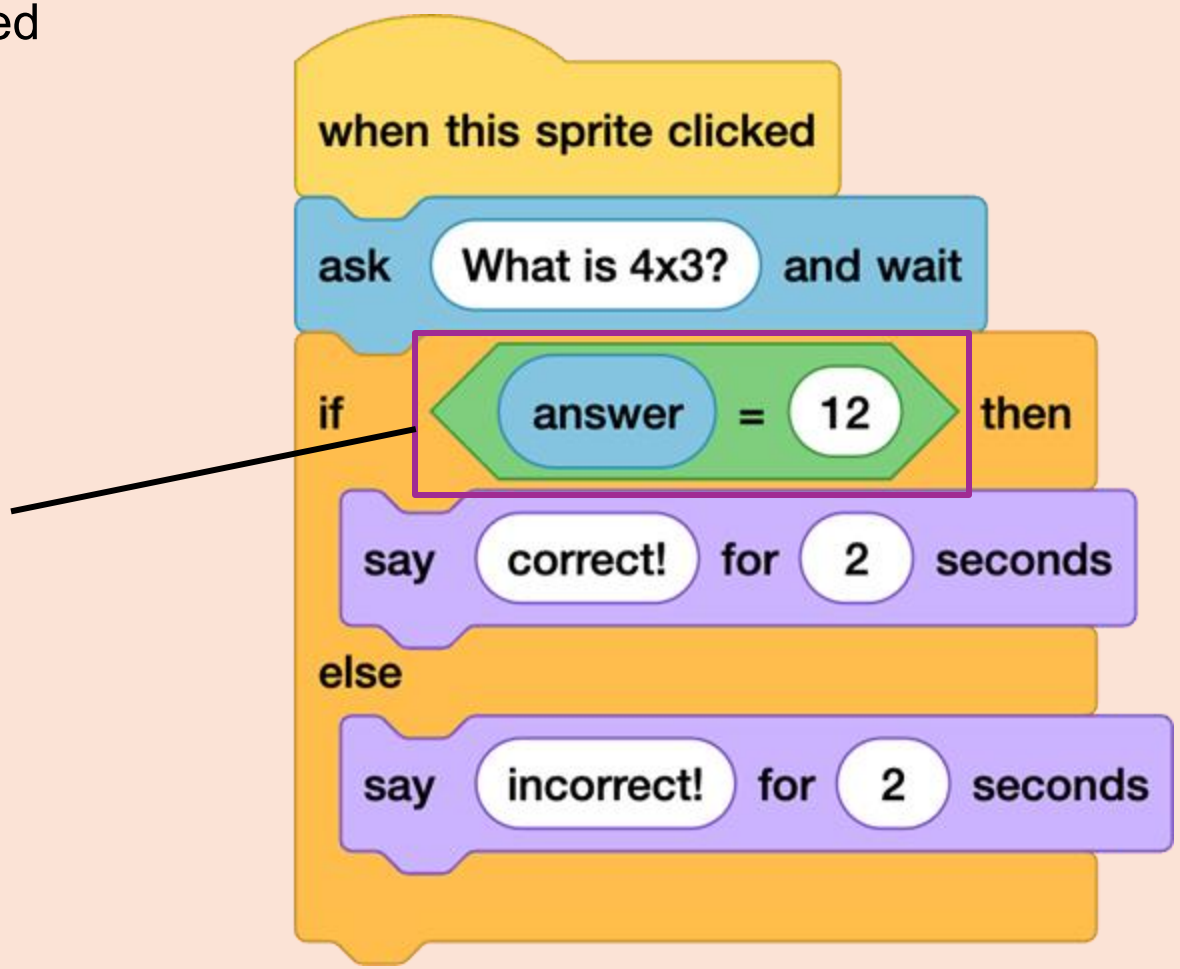


The condition can be either True or False.



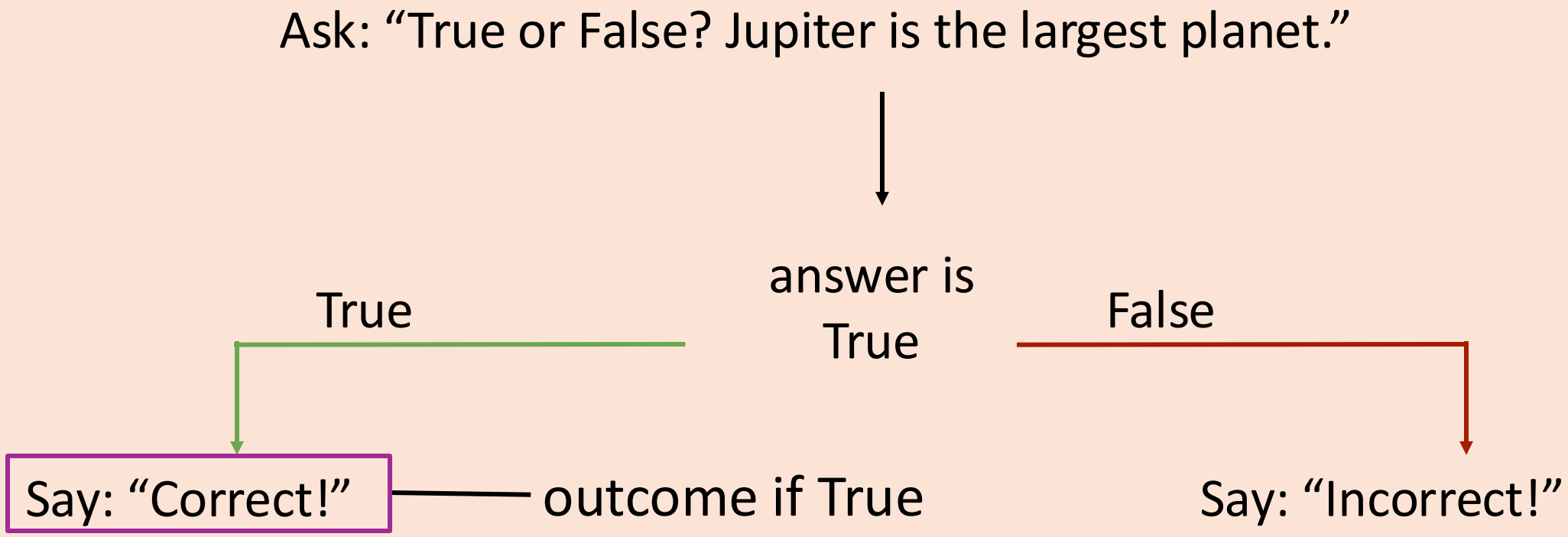
When the word **‘input’** is used, it means the typed text or numbers that the user will enter.

Whatever they **input** will be checked against the condition here.

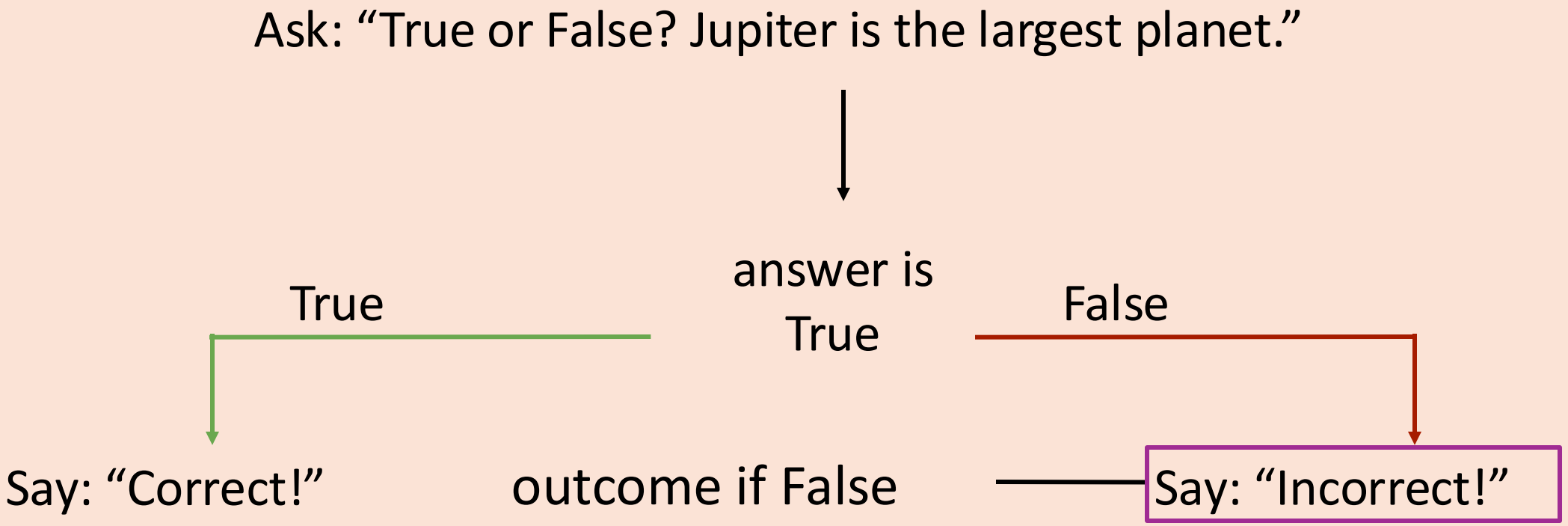


Scratch is a project of the Scratch Foundation. It is available for free at https://scratch.org.

If the user's **input** matches the condition,
the True outcome will happen.



If anything other than the True outcome is entered, the False outcome will happen.

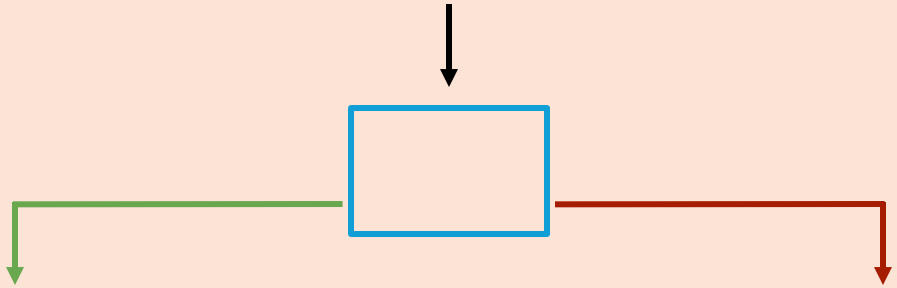


Create a design for a quiz

Explanation

A **branching algorithm** can be a great way to plan for a Scratch quiz, as it will help you to plan to use selection and identify the True and the False outcomes.

Each question in your quiz will need a condition, and two outcomes.



Look at your questions from the mind map.

For each one, think of a condition, a True outcome and a False outcome.

Aisha

My question will be “True or False? Jupiter is the largest planet.”
The condition to check against will be “True”.
The True outcome will be “Correct!”
The False outcome will be “Incorrect!”

Create a design for a quiz

Explanation

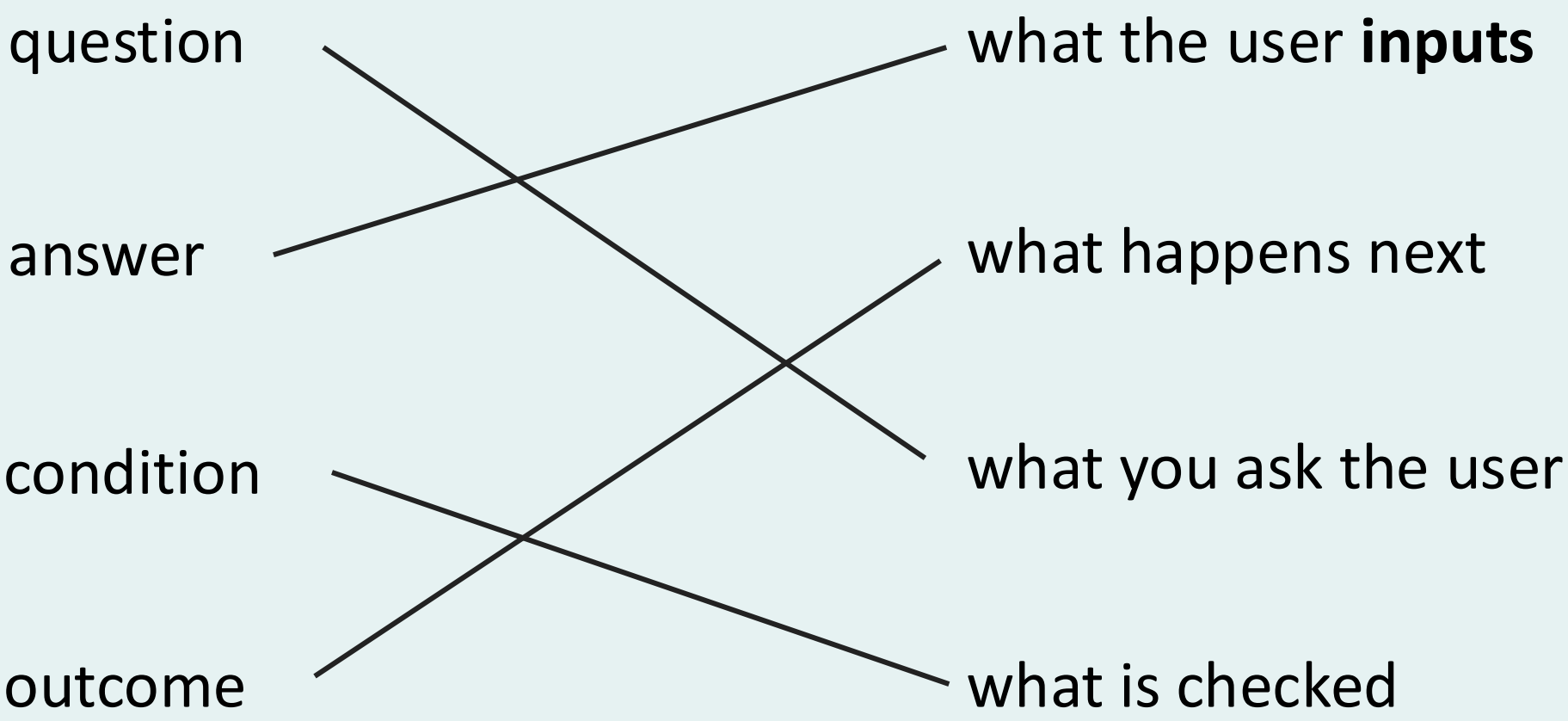
Some of your question ideas might not fit easily into your **branching algorithm**.

They might not have two clear outcomes for True and False. They might make the user **input** a complicated word, where it would be easy to spell it incorrectly.

You should change your questions to fit what your program will need.

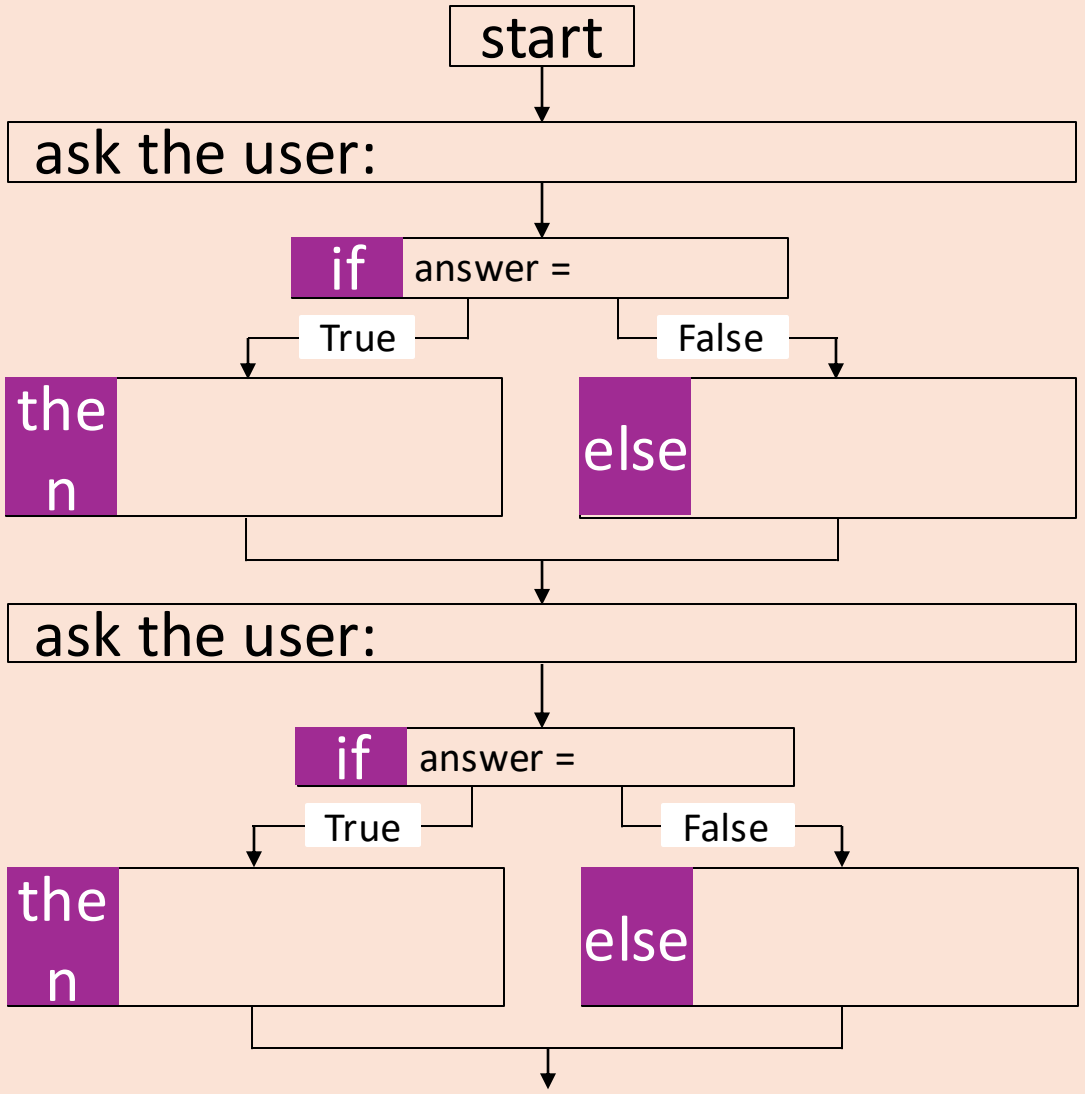
Check

Match each word to its definition.



Create a design for a quiz

Explanation

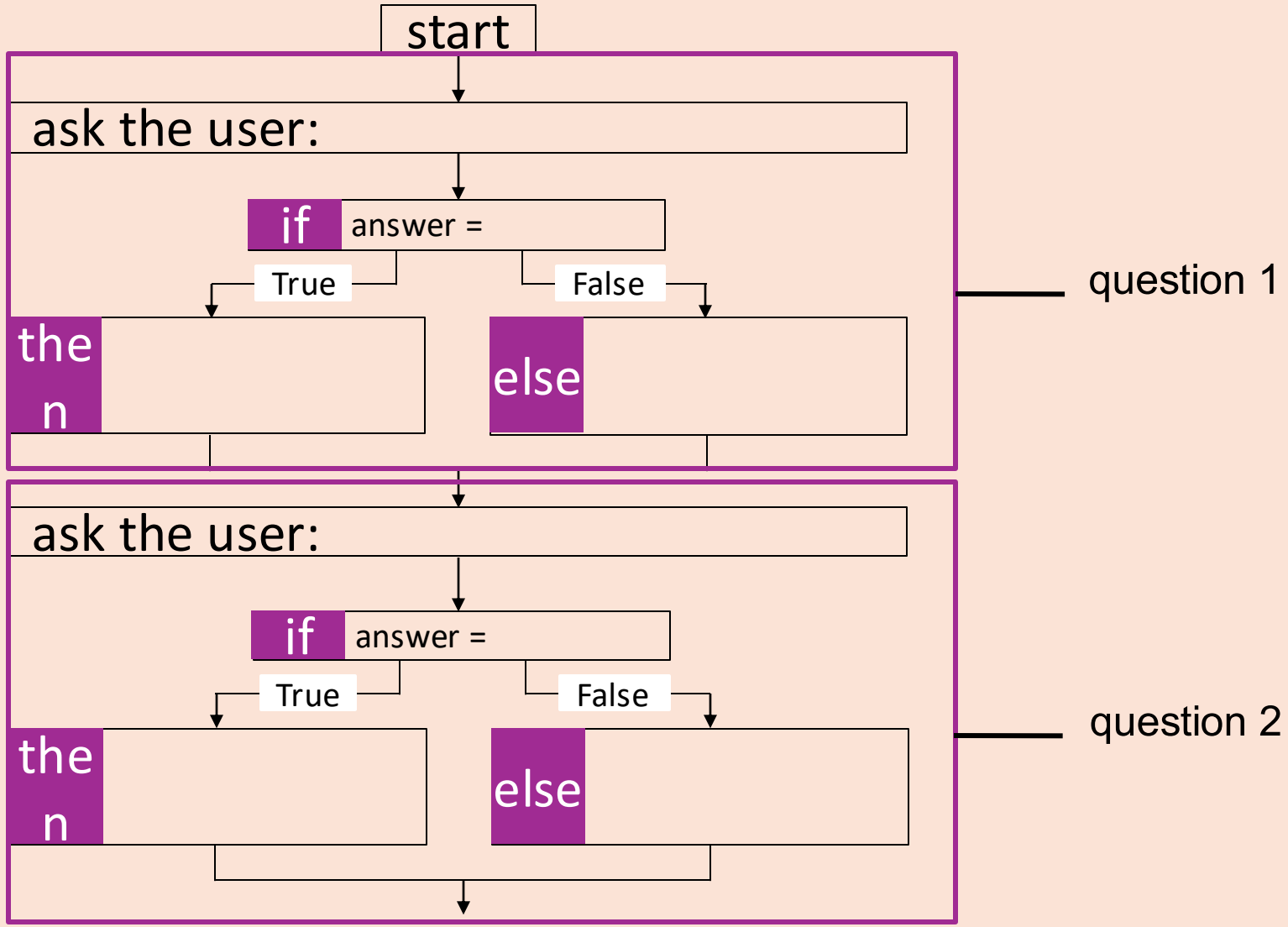


The quiz design sheet, provided as a downloadable file for this lesson, uses a longer **branching algorithm**. This is because your quiz will have more than one question.

After the first question outcome runs, the next question will start.

Create a design for a quiz

Explanation

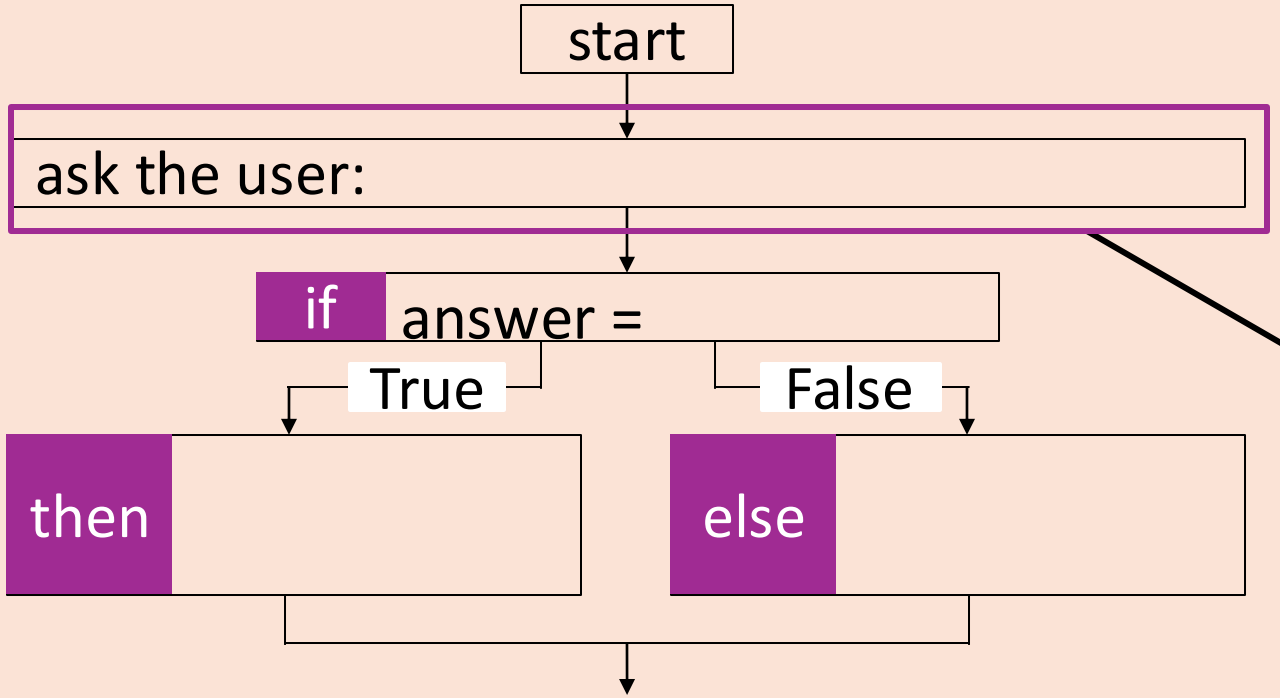


question 1

question 2

Create a design for a quiz

Explanation

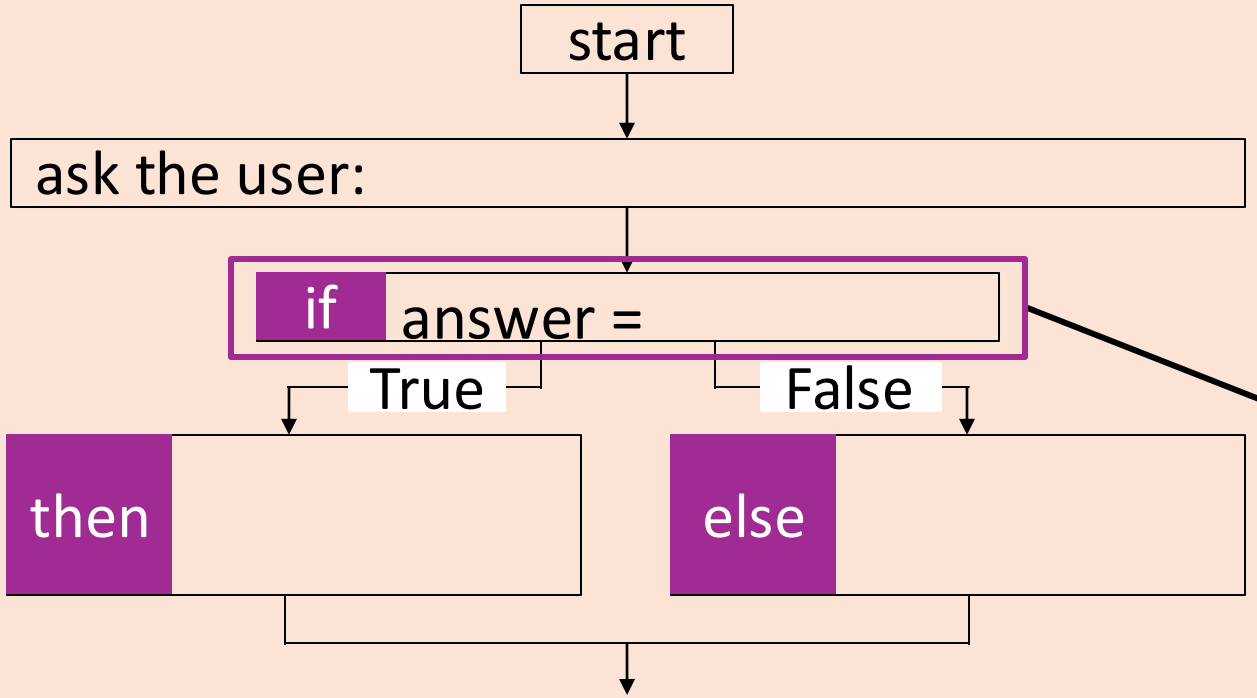


For each question, make sure you have completed:

ask the user: your question

Create a design for a quiz

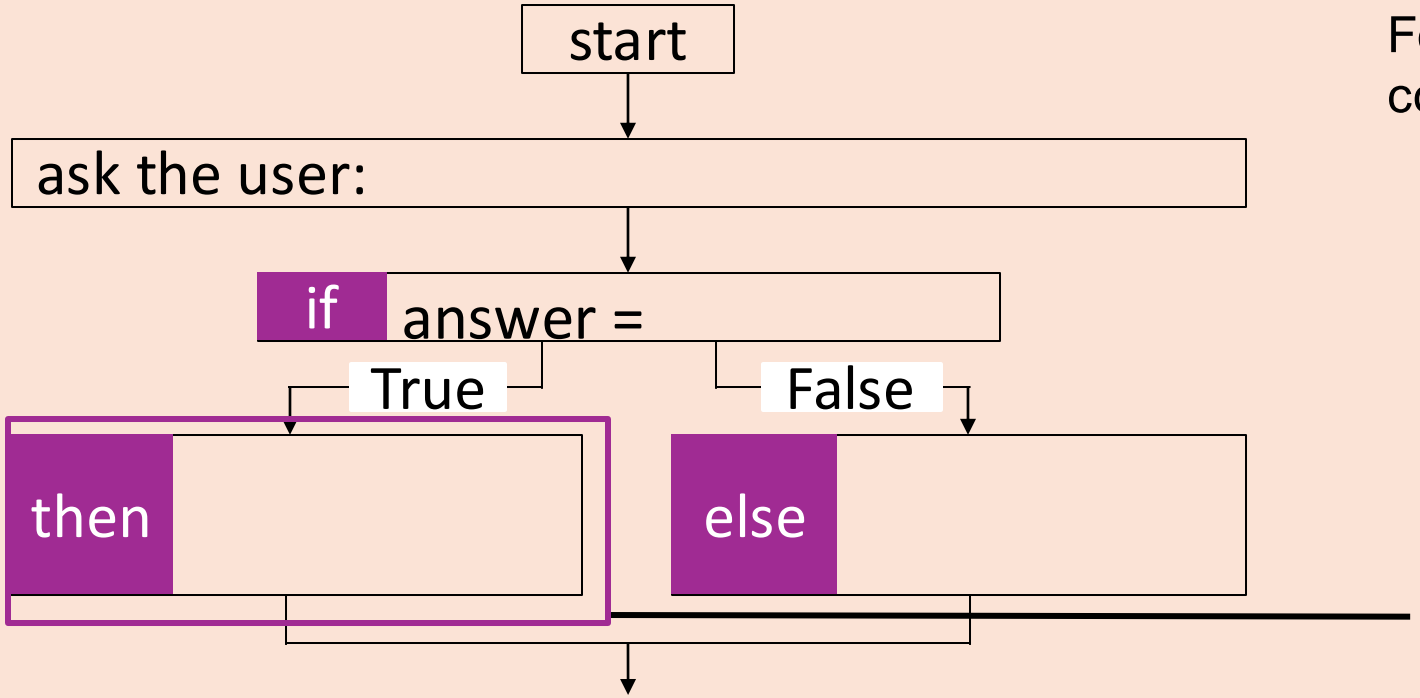
Explanation



For each question, make sure you have completed:

answer = the condition (this is the correct answer)

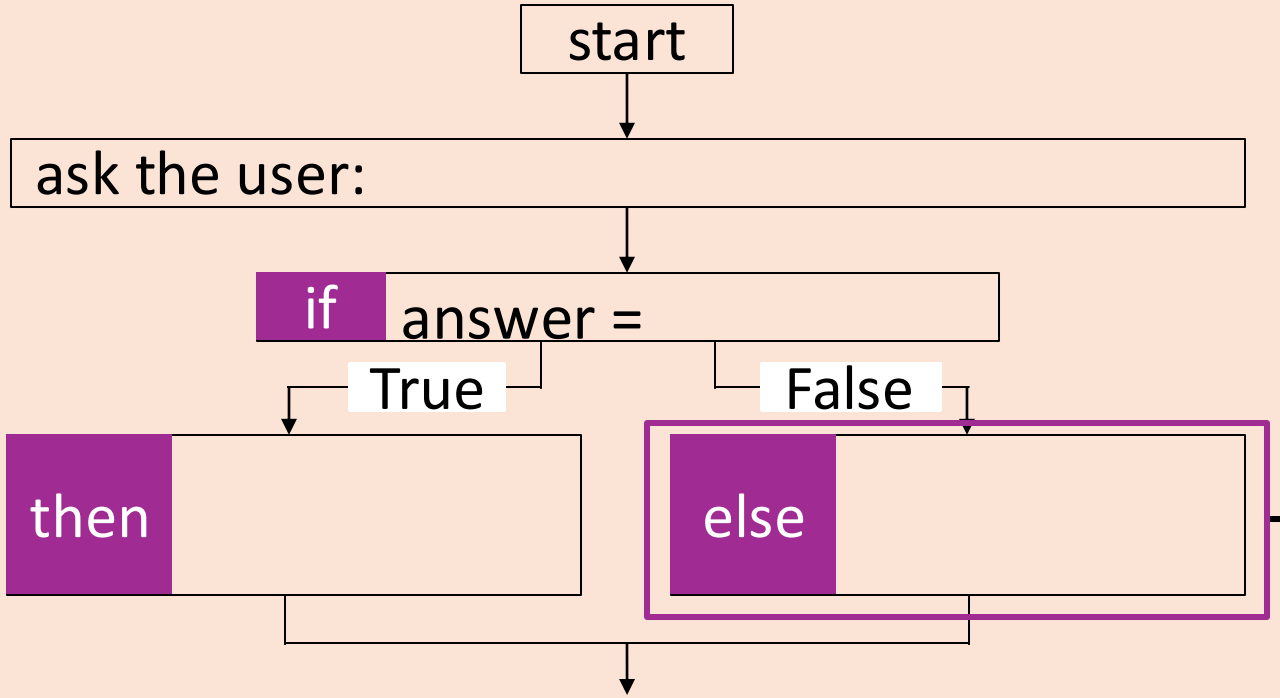
Explanation



For each question, make sure you have completed:

then: what happens when the answer is correct?

add sprite or program actions



For each question, make sure you have completed:

else: what happens when the answer is incorrect?

add sprite or program actions

Task B

Create a design for a quiz

Practice

Complete the quiz design sheet, provided as a downloadable file.

You should have two or more questions.

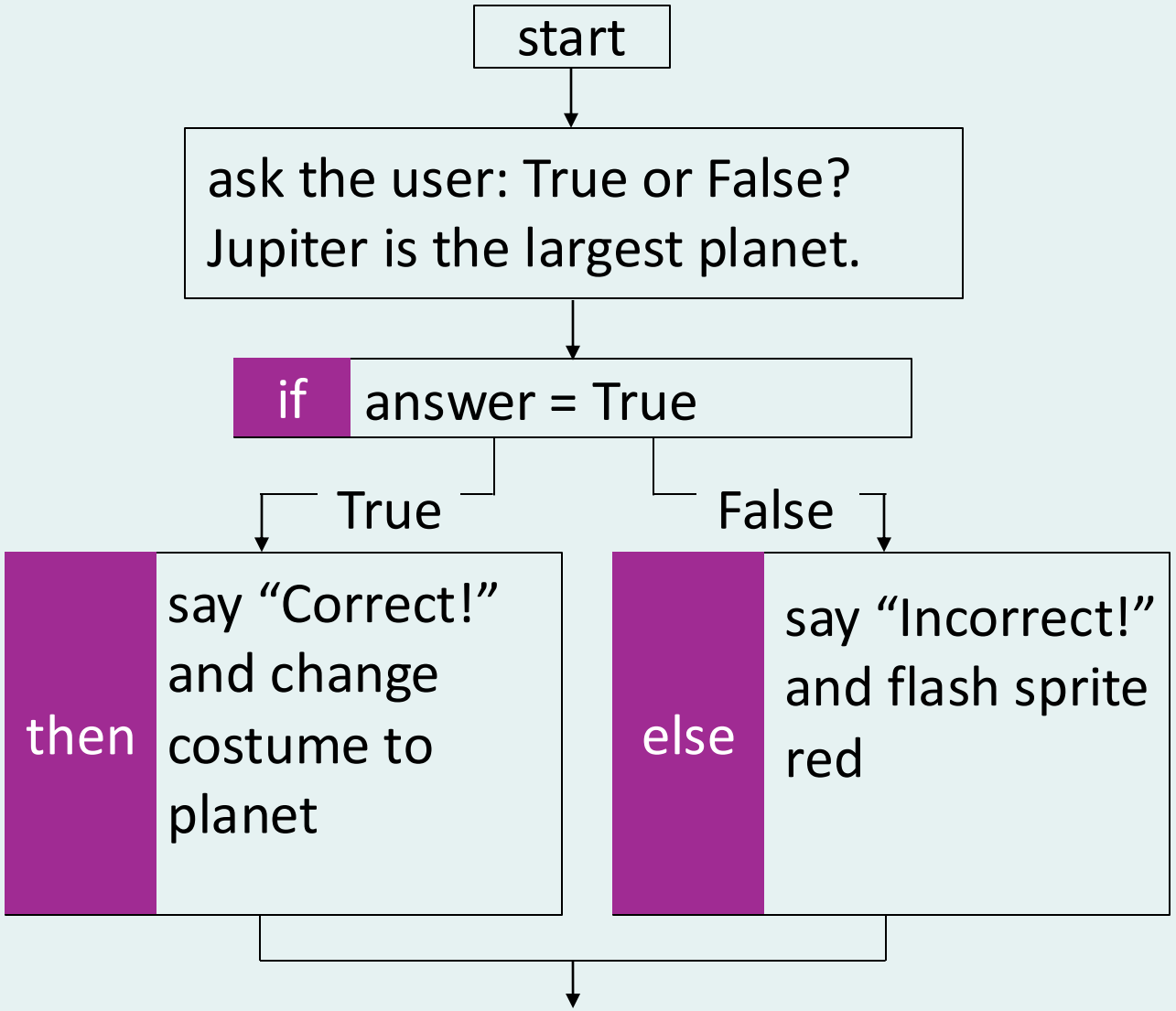
Each question should have:

- ask: what question you are asking the user
- answer: what the True condition is
- then: outcome if the condition is True
- else: outcome if the condition is False

Task B

Create a design for a quiz

Feedback



Open the quiz design sheet example, provided as a downloadable file.