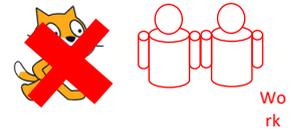


**Pico and Terra
PRIMM Page 1
PREDICT**

You can ask your teacher to read any part of this sheet



Match the code to the correct summary on the left

- Asks a question and gives **different** answers if your answer is the **same** or **different** to the answer in the condition
- Asks a question **over and over again** until you type in the answer in the condition
- Asks a question and gives different answers if the number you type in is **same as, less than or greater than** the number in the condition
- Asks a question and says something if your answer is the **same** as the answer in the condition
- Says something until Scratch **senses a noise** greater than 50

```
ask 20+10=? and wait
if answer = 30 then
  say Well done your answer is correct for 4 secs
```

```
ask 50x3=? and wait
if answer = 150 then
  say Correct for 2 secs
else
  say The right answer was 150 for 4 secs
```

```
ask How old are you? and wait
if answer = 8 then
  say Hey you are 8 like me. for 4 secs
  say We can be best friends for 4 secs
```

```
if answer < 8 then
  say You are younger than me! for 4 secs
```

```
if answer > 8 then
  say You are older than me! for 4 secs
```

```
repeat until answer = Pico
  ask What quiz is best? and wait
  say Pico rules
```

```
say If loudness is greater than 50 I will stop talking
wait until loudness > 50
say
```

Now mark your predictions using the answer sheet

Name



RUN & INVESTIGATE

Run the code inside **Pico** and answer these questions.



1, Complete the table to show numbers of code types in Pico

Condition stops loop	Condition starts action	Condition switches between actions	Count controlled loop

2, What does = mean in these conditions?

3, When asked 20+10=? What happens if you get the answer wrong?

4, In the question 50x3 what will the program say if the user types the answer 150?

5, What will the program do if the user gets the 50x3 question wrong?

6, Write the Scratch names for the two loops in the Pico code



Run the code inside **Terra** and answer these questions.

7, Which blocks are initialisation? Designed to set the code back to how it was before it was run

8, In the question **How old are you?** What happens if you are less than < 8?

9, In the question **How old are you?** list all the conditions.

10, What condition causes Terra to stop saying something near the end of the code?

Now mark the **INVESTIGATE** questions using the answer sheet

Condition stops pause

Condition-starts-action

Condition stops loop

Condition switches between actions

Name

Pico and Terra
PRIMM Page 3
MODIFY



Modify Code in Pico (Make small changes or small additions to the code)

1, Change the code to make the first question say something other than “Well done your answer is correct” when the answer is the same as 30. What did you change it to?

2, Add a short sound or simple graphic effect to the $50 \times 3 = ?$ question if someone gets the answer right only? What did you add?

3, Change the repeat until question and answer. What did you change them both too?



Modify Code in Terra

4, Modify the ‘*How old are you?*’ question so that Terra is 9. List all the changes you needed to make

A,

B,

C,

D,

5 Modify the loudness condition so the script ends after a quieter loudness input. What did you change?

Now mark the modify questions using the answer sheet

Name



Create easier choices (Choose one or more of these ideas first)

1, Add another maths question to the bottom of the code in Pico.

2, Add the question *'Do you like Chips?'* to the bottom of the code in Terra. Give a funny answer if they do or do not like chips.

Create harder choices (Choose one or more of these ideas second)

1, Create your own fun quiz about any topic. Either choose a new sprite or start a new program. Use as many different type of conditional selection block as you can.

2, Ask lots of questions about the user and give funny answers to each one. Either choose a new sprite or start a new program. Use as many different type of conditional selection block as you can.

Use the space below to plan your harder choice

My idea

My design (questions)

Name

Pico and Terra
PRIMM Page 1
PREDICT ANSWERS

Match the code to the correct summary on the left

Asks a question and gives **different** answers if your answer is the **same** or **different** to the answer in the condition

Asks a question **over and over again** until you type in the answer in the condition

Asks a question and gives different answers if the number you type in is **same as, less than or greater than** the number in the condition

Asks a question and says something if your answer is the **same** as the answer in the condition

Says something until Scratch **senses a noise** greater than 50

```
ask 20+10=? and wait
if answer = 30 then
  say Well done your answer is correct for 4 secs
```

```
ask 50x3=? and wait
if answer = 150 then
  say Correct for 2 secs
else
  say The right answer was 150 for 4 secs
```

```
ask How old are you? and wait
if answer = 8 then
  say Hey you are 8 like me. for 4 secs
  say We can be best friends for 4 secs
```

```
if answer < 8 then
  say You are younger than me! for 4 secs
```

```
if answer > 8 then
  say You are older than me! for 4 secs
```

```
repeat until answer = Pico
  ask What quiz is best? and wait
  say Pico rules
```

```
say If loudness is greater than 50 I will stop talking
wait until loudness > 50
say
```

One mark for each correct arrow
Maximum 5 marks

RUN & INVESTIGATE ANSWERS

Pico Questions and Answers



1, Complete the table to show numbers of code types in Pico

Condition stops loop	Condition starts action	Condition switches between actions	Count controlled loop
1 (1 mark)	1 (1 mark)	1 (1 mark)	1 (1 mark)

2, What does = mean in these conditions?

The same as (1 mark)

3, When asked 20+10=? What happens if you get the answer wrong?

Nothing happens (1 mark)

4, In the question 50x3 what will the program say if the user types the answer 150?

Correct (1 mark)

5, What will the program do if the user gets the 50x3 question wrong?

Say the right answer was 150 (1 mark)

6, Write the Scratch names for the two loops in the Pico code

Repeat until (1 mark) repeat (1 mark)



Terra Questions and Answers

7, Which blocks are initialisation? Designed to set the code back to how it was before it was run

Set rotation style left right, point in direction -90, switch costume to terra b (3 marks max)

8, In the question **How old are you?** What happens if you are less than < 8?

Say you are younger than me (1 mark)

9, In the question **How old are you?** list all the conditions.

Answer same as 8 (1 mark) answer less than 8 (1 mark) answer greater than 8 (1 mark)

If you use symbols instead = > < these are also correct

10, What condition causes Terra to stop saying something near the end of the code?

Loudness greater than 50 or loudness > 50 or greater than 50 (1 mark)

Pico and Terra
PRIMM
MODIFY ANSWERS



Modify Code in Pico Answers

1, Change the code to make the first question say something other than “Well done your answer is correct” when the answer is the same as 30. What did you change it to?

Any answer that shows you changed the text (1 mark)

2, Add a short sound or simple graphic effect to the $50 \times 3 = ?$ question if someone gets the answer right only? What did you add?

Any answer that shows a graphic effect or sound added (1 mark)

3, Change the repeat until question and answer. What did you change them both too?

Answer = Fred

Ask Who rules?

Any answer that changes both ask and answer (2 marks)



Modify Code in Terra Answers

4, Modify the ‘How old are you?’ question so that Terra is 9. List all the changes you needed to make

A, if answer = 9 (1 mark)

B, Say hey you are 9 like me (1 mark)

C, if answer < 9 (1 mark)

D, if answer > 9 (1 mark)

5 Modify the loudness condition so the script ends after a quieter loudness input. What did you change?

Any number less than 50 (1 mark)

Modify Maximum 9