



Answering and justifying

A clear sentence, a precise argument, a conclusion that adds something.



1 What is expected



Answering a question in Science means writing a clear sentence, then justifying it with an observation, a piece of data or a calculation. One word is never enough.

2 The method in 4 steps

1



Read the question and find the command word.

2



Choose what you need: a document, a value, an observation or a calculation.

3



Write a full answer sentence.

4



Justify it with a precise argument.

3 The command words

State, give

take the information from the document, without explaining it

Describe

say what you see, with the values and the units

Calculate

use a formula, give the answer with its unit

Compare

say what is larger, smaller or equal, with figures

Explain

say why, using something you have learnt

Justify

give the evidence: data, an observation or a calculation

Conclude

answer the question that was asked

4 The shape of a good answer

Answer

+

Justification

+

Conclusion

The conclusion does not repeat the answer: it draws a consequence from it, or it answers the question that started everything.

Useful phrases

Yes, because...

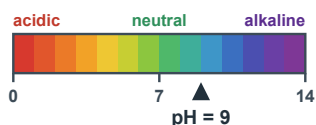
No, because...

According to the document...

The calculation shows that...

We can conclude that...

5 A worked example



Question

Is the solution alkaline?

Answer

Yes, the solution is alkaline.

Justification

Its pH is 9, and a solution is alkaline when its pH is above 7.

Conclusion

It must therefore be handled with gloves and goggles.

6 Avoid

- ✗ Answering with a single word.
- ✗ Copying the document without explaining.
- ✗ Leaving out the evidence or the data.
- ✗ Repeating the answer as the conclusion.



Check before handing it in

- ✓ I have found the command word
- ✓ I have given a precise argument

- ✓ I have written a full answer sentence
- ✓ My conclusion adds something

