GVC 8.0 Science vs Engineering
A public quiz for schools

Play   **Challenge**

Scientific Method #scientificmethod engineering design process

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https://play.kahoot.it/#/?quizId=a1701a97-05ec-4031-9c5e-59daa2b93dc6

Questions (30)

Q1: The first step in the scientific method is....

▲ gather evidence

◆ create a conclusion

● create a hypothesis

■ create a testable question

Q2: Scientists share their findings to....

▲ learn from each other

◆ keep their work secret

● compete with each other

■ so they don't have to repeat it

Q3: When we gather information using the 5 senses this is called....

▲ stating a hypothesis

◆ forming conclusions

● making observations

■ performing experiments

Q4: A controlled experiment...

▲ only tests one variable

◆ tests multiple variables

● does not add any variables to the tests

■ Usually only includes one trial

Q5: The **Independent Variable** is...

▲ the variable that you plan to change.

◆ the variable that you measure.

● a group of variables that remain the same.

■ a comparison group

Q6: The **Dependent Variable** is...

▲ a group of variables that remain the same.

◆ the variable that you measure.

● the variable that you plan to change.

◼ a group used as a comparison

Q7: The **Control** is...

▲ a variable that stays the same

◆ a variable that you are measuring

● a variable that you are testing.

◼ a variable that changes during the experiment

Q8: The # of potatoes grown depends on the minerals in the soil.
What is the Independent Variable?

▲ number of potatoes

◆ how much sun the potatoes get

● mineral content in soil

◼ how much water the potatoes get

Q9: How does the type of surface affect the braking distance of a vehicle? **What is a Control?**

▲ type of surface

◆ vehicle

● braking distance

◼ type of fuel

Q10: How does the amount of caffeine affect blood pressure? **What**

is the dependent variable?

▲ amount of caffeine

◆ blood pressure

Q11: Interpretting data: In the graph below what is the 2nd most popular sport in the school

▲ other

◆ soccer

● basketball

■ softball

Q12: How many more people like cats than goldfish?

▲ 2

◆ 5

● 8

■ 4

Q13: According to the pie chart, which pet is the most common?

▲ dogs

◆ cats

● fish

🟩 hamsters

Q14: In which part of the Engineering Design Process would you follow your plan to make something?

🔺 Ask

🔷 create

🟠 Imagine

🟩 improve

Q15: In which step of the Engineering Design Process would you make a diagram?

🔺 ask

🔷 plan

🟠 imagine

🟩 create

Q16: In which step of the Engineering Design Process would you make your design even better?

🔺 imagine

🔷 plan

🟠 create

🟩 improve

Q17: In which part of the Engineering Design Process would you brainstorm ideas?

brainstorm ideas?

▲ create

◆ imagine

● plan

■ ask

Q18: How does climate at which apples are grown affect their size/taste? **Quantitive data collected?**

▲ size

◆ climate

● taste

■ type of apple

Q19: The ability whether an object oats/sinks depends on its density. **Qualitative data collected?**

▲ density

◆ amount of water

● object sink or float

Q20: A guess for what has been observed. **Which word does this denition apply to?**

▲ Conclusion

◆ Observation

🟠 Inference

🟩 Results

Q21: Observations are any information you collect using your...

🔺 notes

🔷 textbook

🟠 internet

🟩 senses

Q22: Observations that can be measured in **numbers** are...

🔺 qualitative

🔷 inferences

🟠 quantitative

🟩 variables

Q23: An observation that describes the properties of something

🔺 qualitative

🔷 quantitative

🟠 inference

🟩 evidence

Q24: The scissors are very sharp is a

▲ Quantitative observation

◆ Qualitative observation

Q25: The boy was 6' 8" tall is a

▲ Qualitative observation

◆ Quantitative observation

Q26: The train was traveling 125 mph is a

▲ Quantitative observation

◆ Qualitative observation

Q27: The dog barked for an hour is a(n)

▲ Observation

◆ Inference

Q28: The dog is barking because a squirrel ran by is a(n)

▲ Inference

◆ Observation

Q29: A student is sitting in the main office waiting to see the vice principal is a(n)

▲ Inference

◆ Observation

Q30: The student has to see the Mr. Showalter because he was talking too much in class is a(n)

▲ Observation

◆ Inference