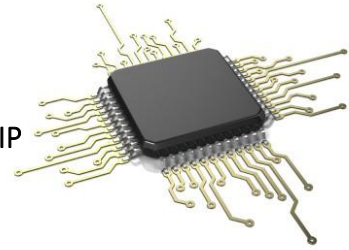


THE CASE OF THE MISSING COMPUTER CHIP

Summarize the Case of the missing chip:



INSTRUCTIONS for each team:

1. Read the Introduction
2. Study the map of the crime scene
3. After reading the above introduction and studying the map of the crime scene, your team should draw 5 (five) clues at random from the envelope.
4. Using the information at hand, try to solve the crime. You can organize the evidence in various ways, until your team develops a tentative hypothesis. Do not discourage minority opinions. Commit yourselves by writing down this hypothesis.

HYPOTHESIS after 5 clues; who stole the chip? _____

Give a reason why:

5. Once you have exhausted all your ideas with these clues, more evidence can be uncovered. Your team may now draw 3 (three) more clues from the envelope, at random. Repeat step 4.

HYPOTHESIS after 8 clues; who stole the chip? _____

Give a reason why:

6. Draw the last 3 clues, and continue as before until there is some general agreement, always allowing for minority opinions. Record your final team consensus...your hypothesis for what happened, and who was probably responsible. Be able to defend your hypothesis.

FINAL HYPOTHESIS after 12 clues; who stole the chip? _____

Give a reason why:

Reflection questions:

1. Why do we say that an explanation in science is "tentative"?
2. How does this activity explain the idea that science is built on evidence?
3. Evidence is often confusing, seemingly conflicting, and apparently random. Give an example on how you observed this during the activity.
4. Scientists hope to be able to find more than one line of evidence to help them solve a problem that may allow new and different ways of looking at a problem. What happens when you got new pieces of evidence during the activity? Give an example.
5. Scientists use a variety of criteria to compare explanations and select the better ones. Give an example of a clue that was important to your final hypothesis.
6. Another important aspect of the game is that it is open ended. There is not enough information presented to say with certainty who the thief is and each clue may often create more questions than it helps answer. Do you think this is the same for science? Explain your answer.
7. Finally, this is a simulation many groups were attempting to solve the crime and some came up with different answers. Do you think this is true for science as well? Explain your answer.