**GEOMETRY NAME \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**WS Logic Puzzles Period \_\_\_\_\_\_\_\_\_\_\_**

**Three Little Pigs**

The three little pigs, as you know, built houses—one of straw, one of sticks, and one of bricks. By reading the six cues, figure out which pig built each house, the size of each house, and the town in which each house was located. Use a chart to keep track of your information and your logic.

|  |  |  |  |
| --- | --- | --- | --- |
|  | Town | Size | Material |
| Patricia Pig |  |  |  |
| Penny Pig |  |  |  |
| Peter Pig |  |  |  |

HINTS:

1. Penny Pig did not build a brick house.
2. The straw house was not medium sized.
3. Peter’s house was made of sticks, and it was neither medium nor small.
4. Patricia Pig built her house in Pleasantville.
5. The house in Hillsdale was large.
6. One house was in a town called Riverview.

QUESTIONS:…

1. Who built a straw house?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. In what town is Patricia’s house? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. What size house did Penny build? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. Which pig built the house in Hillsdale? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5. How big is the brick house? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

6. In what town is the medium house? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**GEOMETRY NAME \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**WS Logic Puzzles Period \_\_\_\_\_\_\_\_\_\_\_**

**You’ve Got Character!**

Four students wrote book reports on the same book. Each student described the main character in his or her report. But their teacher could tell that these students didn’t read very carefully, because each one described the main character differently.

* Annie wrote that his name is Heathcliff, he is short, he has long hair, and that he wears an earring.
* Bernard wrote that his name is Sherlock and that he is tall, has long hair, and wears an earring.
* Carolyn wrote that his name is Romeo and that he is medium height, has short hair, and wears an earring.
* Daniel wrote that his name is Harry and that he is short, has long hair, and never wears an earring.

**EACH STUDENT GOT ONLY ONE DETAIL OF FOUR CORRECT**.

What is the correct description of the main character of the book?

Suggestion: Begin by making a chart like the following:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Student | character | height | hair length | earring? |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

CONCLUSION:

Describe the main character of the book they read using 4 words:

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |

**CRIME SCENE #5 – The Deadly Picnic**

Have you ever played the board game C1ue? In this game, players gather information in order

to determine the murderer, murder weapon, and crime scene. Actually, participants are not

“guessing” when they play this game; they are using deductive reasoning. As players gather

more information, they begin to put together the pieces of the mystery

Police investigators follow a process similar to that used in C1ue. The investigators collect

and evaluate evidence from a crime scene. All of the information they gather is compiled and

placed in the criminal case file. As new evidence becomes available, it is added to the file.

Police investigators rarely learn about events in the same sequence in which they took place

during the crime. Usually the leads are acquired in random order. Once a large portion of

information is known, the police experts must sit down and put the pieces together, like you

would assemble a jigsaw puzzle.

Deductive reasoning is the thought process that police investigators use to assemble the pieces

of the criminal puzzle and reach a logical conclusion. In deductive reasoning, investigators

utilize logical and critical-thinking skills to reach a conclusion.

**THE DEADLY PICNIC**

**A Lab on Deductive Reasoning**

***Objective -*** You will use deductive reasoning to decide who committed the murder.

***Background Information***

Centerville police discovered the body of a 36-year-old white male (later identified as Gaven

Brooks) in an open field of daisies about five miles outside of town. Mr. Brooks’s body was discovered

at 10:02 PM. Friday night, October 11. He was found lying face up on a yellow, queensize

sheet. According to autopsy reports, one fatal gunshot to the back of the head ended Mr.

Brooks’s life. Scientists estimate that death occurred at about 7:45 P.M.

As investigators scanned the crime scene, they made the following notes:

• Paper plates filled with partially eaten fried chicken, potato salad, and chocolate

cake were located near Mr. Brooks’s body.

• An open bottle of red wine and two partially-filled glasses of wine were found

next to the yellow sheet.

• One of the wine glasses had a smudge of red lipstick on the rim.

• A recently smoked cigarette butt was found near the sheet.

• Footprints from the road to the field were those of a male, size 10, and a female,

size 5. The only footprints from the field back to the road were those of a female,

size 5*.*

• Car tracks of the same wheel base and tread pattern as Mr. Brooks’s automobile

were found at the road. The car was not found at the scene.

• Later that evening Mr. Brooks’s car was found abandoned in an empty parking lot

in downtime Centerville.

Investigators believe that a female friend of Mr. Brooks was responsible for his demise. After

questioning family and friends, it was discovered that the deceased had frequent social outings

with six women who live in or near Centerville. The women’s names are Rita, Lauren, Gail,

Janice, Elaine, and Peggy. In today’s lab you will answer these questions: Who was responsible

for the murder? What events surrounded this murder? *Materials - Pencil*

***Procedure***

1. After reading the Background Information, record some important pieces of information in

Data Table 1.

2. Read the special notes (given below) that the police gathered during their investigation.

Record this information in Data Table 2.

3. Special notes gathered by police investigation:

• Janice works full time as a cosmetologist.

• Elaine and Gail are school teachers.

• Peggy and Elaine live together in a two-bedroom apartment in downtown Centerville.

• Gail lives in a nearby town called Jordan.

• Rita lives in a country house about three miles to the west of Centerville.

• Elaine and Janice are very petite women—they wear size 4 blue jeans.

• Gail and Janice are nonsmokers.

• Janice works part time as an aerobics instructor at a health club in Centerville. She

teaches a 7:30 P.M. step aerobics class each Friday night and has not missed a class in

two years.

• Peggy is deathly allergic to grapes.

• Peggy doesn’t wear lipstick.

• Gail attends the aerobics class that Janice teaches. She has not missed a Friday night

class in nine months.

• Lauren works at a chemical supply house.

• Rita’s father owns a rifle range.

• Lauren is allergic to all species of flowering plants.

• Rita is a florist.

• Rita doesn’t wear lipstick.

• Janice and Elaine have never met.

• Janice and Gail hate the color yellow.

• Lauren played center for a semi-professional basketball team five years ago. She has

red hair and is 6-feet, 1-inch tall.

***Postlab Questions***

1. Who do you believe killed Mr. Brooks?

2. Cite key pieces of information that caused you to believe the other five women were

innocent.

3. What information helped you identify the murderer?

4. On a sheet of paper, write a two paragraph story that describes what you believe happened

on the night of the murder. Explain how the couple got to the murder site, why they went

there, what happened while they were there, and how the murderer escaped. What do you

believe was her motive?



