Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Pd:\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_

**Activity 1: The Goldilocks Principle**

For this activity you will need to recall the story of "Goldilocks and the Three Bears". In the story, Goldilocks is faced with several choices during her time in the Bears' home.

A. Consider the information given in the table below and answer the following questions.

|  |  |  |  |
| --- | --- | --- | --- |
| **Bowl Name:** | Papa Bear | Mama Bear | Baby Bear |
| **Bowl Temp:** | 85oC | 20oC | 52oC |
| **Bowl Diameter:** | 20 cm | 13 cm | 4 cm |
| **Bowl Color:** | Electric Blue | Red | Yellow |

1. Whose bowl of porridge did Goldilocks choose?

ii. What characteristic about the porridge did Goldilocks use to decide which bowl was "just right"?

B. Consider the information given in the table below and answer the following questions.

|  |  |  |  |
| --- | --- | --- | --- |
| **Chair Name:** | Papa Bear | Mama Bear | Baby Bear |
| **Chair Temp:** | 22oC | 22oC | 22oC |
| **Chair Height:** | 40 cm | 33 cm | 20 cm |
| **Chair Material:** | Metal | Wood | Plastic |

i. Which chair did Goldilocks choose?

ii. What characteristic about the chairs did Goldilocks use to decide which one was "just right"?

C. Consider the information given in the table below and answer the following questions.

|  |  |  |  |
| --- | --- | --- | --- |
| **Bed Name:** | Papa Bear | Mama Bear | Baby Bear |
| **Bed Temp:** | 22oC | 22oC | 22oC |
| **Bed Height:** | 15 cm | 15 cm | 15 cm |
| **Bed Stiffness:** | Hard | Soft | Medium |

1. Which bed did Goldilocks choose?

ii. What characteristic about the beds did Goldilocks use to decide which one was "just right"?

D. If the diameter of Papa Bear's bowl had only been 10 cm, would your answers in question A change? If so, how? If not, why not?

E. If Mama Bear's chair was made out of plastic rather than wood, would your answers in question B change? If so, how? If not, why not?

F. If Papa Bear's bed was 12 cm tall, would your answers in question C change? If so, how? If not, why not?

G. If the height of Mama Bear's chair was 38 cm, would your answers in question B change? If so, how? If not, why not?

H. If Mama Bear had a medium stiffness mattress, would your answers in question C change? If so, how? If not, why not?