## Physical Science <br> Dream House Area

Name: $\qquad$ Block: $\qquad$

Look carefully at the drawing of each Dream House. Each lists the width and the depth of the house in feet. The width is measure from one side of the house to the other; the depth is how far it is from the front wall of the house to the back wall. Record these values in the table below.

1. Record these values for each house in the table below (one is filled in for you):

|  | Looking Glass | Concord Manor | Winter Wonderland |
| :--- | :---: | :---: | :---: |
| Width (ft) | 24 ft |  |  |
| Depth (ft) |  |  |  |

2. Compute the width and depth of each house in meters:

|  | Looking Glass | Concord Manor | Winter Wonderland |
| :--- | :--- | :--- | :--- |
| Width (m) |  |  |  |
| Depth (m) |  |  |  |

3. Explain how you calculated this, using one house's width as example:
4. Compute the basic floor area of each house in square feet $\left(\mathrm{ft}^{2}\right)$ :

|  | Looking Glass | Concord Manor | Winter Wonderland |
| :--- | :--- | :--- | :--- |
| Floor area $\left(\mathrm{ft}^{2}\right)$ |  |  |  |

5. Explain how you calculated this, using one house as an example:
6. Compute the basic floor area of each house in square meters $\left(\mathrm{m}^{2}\right)$ :

|  | Looking Glass | Concord Manor | Winter Wonderland |
| :--- | :--- | :--- | :--- |
| Floor area $\left(\mathrm{m}^{2}\right)$ |  |  |  |

7. Explain how you calculated this, using one house as an example:
8. The outside walls of the Concord Manor are 20 feet tall. What is the area of the front wall in square feet? Show how you computed this!
9. What is the area of the same wall in square meters? Show how you computed this!

The Looking Glass


Number of Bedrooms: 1
Number of Bathrooms: 1.0
Width of House: 24 feet
Depth of House: 38 feet
1st Floor Plateline: 80
Foundation Type(s) available for this plan: Crawlspace
Architectural Style: Vacation Exterior Finish: Siding
Exterior Wall Structure: $2 \times 6$ studs Roof Framing: Stick
Primary Roof Pitch: 12:12

The Concord Manor


Number of Bedrooms: 3
Number of Bathrooms: 2.0
Width of House: 27 feet
Depth of House: 27 feet
Architectural Style: Colonial
Exterior Wall Structure: $2 \times 6$ studs
Roof Framing: Truss
Roof Peak: 28 feet
from Front Door Fioor Level
Roof Load: 40 p.s.f.

The Winter Wonderland


Number of Bedrooms: 2
Number of Bathrooms: 2.0
Width of House: 22 feet
Depth of House: 26 feet 1st Floor Plateline: 80 Architectural Style: Colonial Exterior Wall Structure: $2 \times 6$ studs Roof Framing: Truss Primary Roof Pitch: 10:12 Roof Peak: 28 feet
trom Front Door Fioor Level

