**Foundation Systems Worksheet and Notes Page**

**Standard:** ACT-ADDI-6 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**Soil Considerations**

* Bearing capacity of soil must be known before foundation can be designed
  + \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_: amount of weight a square foot of soil can support

**Piling Foundation System**

* Uses beams placed between vertical supports (piling) to support structural loads
  + When \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ exceeds bearing capacity of soil
  + Used on steep hillsides
  + Site subject to flooding

**Continuous Foundation**

* Most common in \_\_\_\_\_\_\_\_\_\_\_\_\_\_ construction
* Consists of a footing and wall
  + Footing: \_\_\_\_\_\_\_\_\_\_\_\_\_\_of the foundation system; made of poured \_\_\_\_\_\_\_\_\_\_\_\_\_\_
  + Footing can be bonded to the foundation wall with a key or with steel

**Grade Beam Foundation**

* Provides added \_\_\_\_\_\_\_\_\_\_\_\_\_\_
  + Grade beam is placed under the \_\_\_\_\_\_\_\_\_\_\_\_\_\_ below the stem wall and spans between stable supports

**Fireplace Footing**

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_ fireplace will need to be supported by a footing
* 12” deep footing that extends 6” past the fireplace on each side

**Veneer Footings**

* An \_\_\_\_\_\_\_\_\_\_\_\_\_\_ of the footing and must be wide enough to provide \_\_\_\_\_\_\_\_\_\_\_\_\_\_ for the veneer

**Foundation Wall**

* Vertical wall that extends from the \_\_\_\_\_\_\_\_\_\_\_\_\_\_ to the \_\_\_\_\_\_\_\_\_\_\_\_\_\_ floor
* Centered on the footing to help evenly spread the \_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Height of the wall must extend \_\_\_\_\_\_\_\_\_\_\_\_\_\_ above the ground

**Retaining/Basement Wall**

* Walls that extend full height between the \_\_\_\_\_\_\_\_\_\_\_\_\_\_ floor and \_\_\_\_\_\_\_\_\_\_\_\_\_\_ floor level
* Basement walls made of poured concrete or concrete blocks
* Used on \_\_\_\_\_\_\_\_\_\_\_\_\_\_ lots

**Pedestals**

* A \_\_\_\_\_\_\_\_\_\_\_\_\_\_ built on top of a footing
* Used when upper soils are \_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Metal Connectors**

* Used to \_\_\_\_\_\_\_\_\_\_\_\_\_\_ the house to the foundation

**On Grade Foundations**

* Slab
  + House is built on a concrete slab that does not allow for a \_\_\_\_\_\_\_\_\_\_\_\_\_\_ or basement

**Quiz Answers**

1)

2)

3)

4)