

Test Items for IGEN Modules

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Zero Energy Buildings

1. Which of the following could be a component of Net Zero building?
Choose all that apply
 - a. Solar photovoltaics
 - b. Energy optimized windows
 - c. Heat recovery ventilation
 - d. Geothermal heat pumps
2. List at **least three** homeowner benefits of a Net Zero Building.
3. Explain what homeowners should be aware of before deciding on the Net Zero Building.
4. List at **least three** careers for those interested in Net Zero Buildings.

Passive House Construction

1. Which of the following is **the basic goal** of the Passive House building principle?
 - a. quantifiable and rigorous level of energy efficiency
 - b. quantifiable comfort level
 - c. health and safety on the construction site
 - d. a and b
2. Which of the following is **true** about passive buildings in comparison to traditional buildings? **Choose all that apply.**
 - a. Energy costs are between 75%-95% lower
 - b. Upfront building costs are 10% - 20% lower
 - c. Emphasizes long-term heat retention methods
 - d. Utilizes thermal mass
3. Explain **at least three** passive building design principles.
4. List **three** homeowner benefits of passive house construction.
5. List **at least three** careers for those with Passive House experience and credentials.

Green Construction

1. Explain at least three Green Construction fundamental principles
2. List one criticism voiced in the use of LEED certification for Green Construction
3. What is the advantage of using advanced framing?
4. Name two Green Construction careers

Healthy Homes

1. Which of the following is **true**? The number of children in the U.S. who have asthma is:
 - a. 1 in 5
 - b. 1 in 7
 - c. 1 in 12
 - d. 1 in 18
2. Which of the following creates outgassing in homes? **Choose all that apply.**
 - a. Pressed wood products
 - b. Formaldehyde in carpeting
 - c. VOCs in paints
 - d. Varnishes
3. What do the IAQ monitors measure to check healthy homes? **Choose all that apply.**
 - a. Moisture
 - b. Radon
 - c. Carbon dioxide
 - d. VOCs
4. List the **eight principles** of a healthy home.
5. Pick **2** of the Healthy Homes principles and list **2 examples for each** of when the principles are not being met.