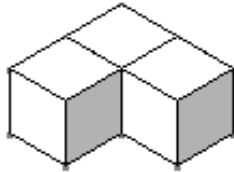


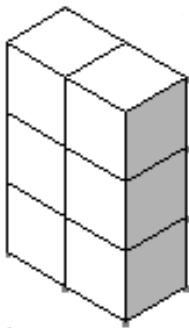
Name: _____ Period: ____ Date: _____

Designing Buildings

You are designing buildings with cubes. Assume that each cube represents a “room” and each vertical outside face is a “window” – this building has 3 rooms and 8 windows.

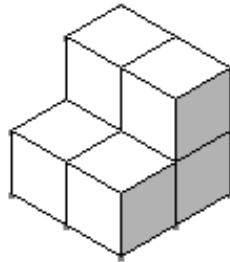


1. For each building below, please indicate how many rooms and windows there are.



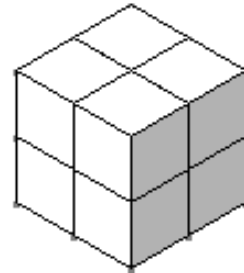
Building A

Rooms: ____ Windows: ____



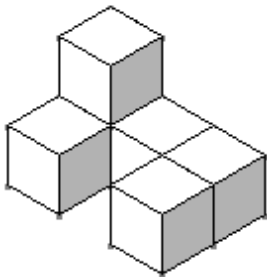
Building B

Rooms: ____ Windows: ____



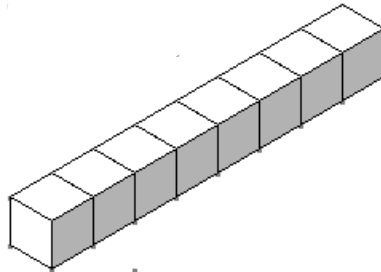
Building C

Rooms: ____ Windows: ____



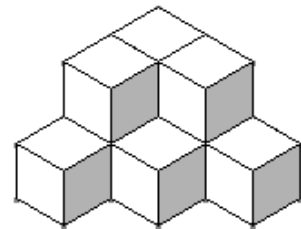
Building D

Rooms: ____ Windows: ____



Building E

Rooms: ____ Windows: ____



Building F

Rooms: ____ Windows: ____

2. Using isometric dot paper, design each building with the number of rooms and windows as indicated. Cut and paste the building in this space.

Building 1	Building 2	Building 3
Rooms: <u>8</u> Windows: <u>22</u>	Rooms: <u>9</u> Windows: <u>24</u>	Rooms: <u>10</u> Windows: <u>28</u>

3. Can you make a building with more room than windows? Explain.
4. Suppose you are working under a building code that requires at least one window for every two rooms. What sort of buildings could be made?