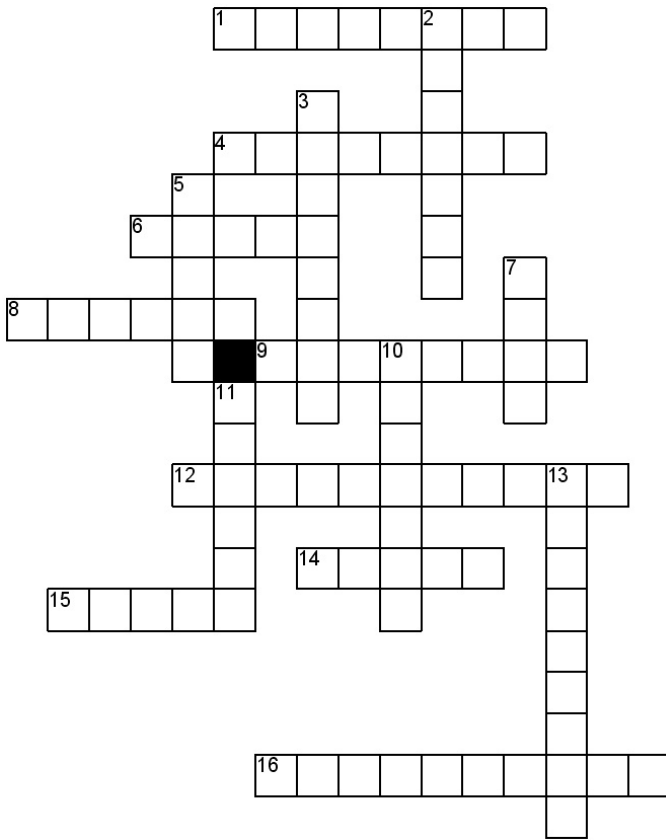


### A. Crossword Puzzle

- ① Read the on-line Earth & Space notes for this chapter (i.e. see "young's-wiki") and complete the crossword.



When solar energy reaches Earth, the energy is either (13d) back into space (30%) or (1a) by Earth's atmosphere, (6a) and land (70%). This absorbed energy is converted to (10d) energy (the energy associated with the temperature of a substance and changes of (14a)) which causes the land and water to become (8a).

A (9a) is any substance that can absorb and store thermal energy with little change in temperature. Some parts of Earth's surface - (11d) and (5d) most importantly - act as heat sinks. The (16a) also acts as a heat sink - greenhouse (15a) in the atmosphere are able to absorb and hold thermal energy. (7d) is least able to act as a heat sink.

Earth's (12a) stays in a livable range even though it is constantly receiving energy from the Sun. This is because some of the absorbed energy is released as (3d) radiation which is then radiated back into space. When the amount of energy coming in is the same as the amount of energy going out, Earth's energy is in (2d). When this occurs, the global temperature stays fairly (4a).

### B. Wrap-Up Notes

- ① Take a blank lined page and at the top of the page, in the middle, write the title for this section.  
 ② Leave a blank line and then, on the left side, write the heading "WRAP UP NOTES".  
 ③ Turn to the last page of the notes (P.314) and add the wrap up notes below this heading. Be sure to write neatly!

### C. Questions

- ① Leave a blank line after the wrap up notes and then, on the left side again, write the heading "QUESTIONS".  
 ② Answer the questions below under this heading. Be sure to use complete sentences and to write neatly!  
 ③ Attach your answers to this sheet when you are finished.

- Describe what happens to solar energy once it reaches Earth.
- In terms of energy, why does Earth's temperature remain fairly constant?
- In terms of absorbed and reflected energy, what would have to happen for Earth to have cooler temperatures?
- What would you expect to happen if the amount of energy reflected by Earth stayed the same but the amount of energy coming from the Sun decreased?