

**ST/Ste Final HW Based on Loose Bits**

**ST**

**Guiding Controls**

1. What is the guiding control for a sliding patio door?
2. What is the guiding control for the front wheel on a bicycle?
3. What is the guiding control for the screw on a clamp?
4. Match each of the above controls with the following:  
A) Translational guide  
B) Rotational guide  
C) Helicoidal guide

**Glaciers**

5. What causes a glacier to form?
6. A) What happens to the level of the sea when many glaciers slide into it?  
B) What happens to the level of the sea after many icebergs melt. (Remember an iceberg is already in the water)

**STE**

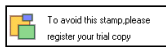
**Buffering Capacity of Soil**

7. What is a buffer?
8. What happens to soil with a good buffering capacity if a small amount of acid is added to it?

**Reading Resistance Charts**

Use the chart to find the resistance, if on a resistor, you have the following lines:

9.



**Appendix 4**

**Resistor Colour Chart**

| Colour     | Black  | Brown  | Red    | orange | Yellow | Green  | Blue   | Purple | Grey   | White  |
|------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Digit      | 0      | 1      | 2      | 3      | 4      | 5      | 6      | 7      | 8      | 9      |
| Multiplier | $10^0$ | $10^1$ | $10^2$ | $10^3$ | $10^4$ | $10^5$ | $10^6$ | $10^7$ | $10^8$ | $10^9$ |

- a) red-orange-yellow.....brown.....
- b) orange-black-black.....orange.....
- c) brown-yellow-black.....yellow.....