

Unit 7

NAME

Class Work

3/4/14

7.6 Entropy

SPARK

Complete your 7.5 Exit Ticket

Objective

SWBAT define entropy

Agenda:

- SPARK/Objective
- Notes
- Practice
- Homework



Objective: SWBAT define entropy

Review of 7.5 HW

1. **B**
2. **D**
3. **C**
4. **C**
5. **A**
6. **B**
7. **A**
8. **D**

9. Acceptable responses include, but are not limited to: • A lower concentration of oxygen gas decreases the number of effective collisions between O_2 molecules and CH_4 molecules.

10. *B*
11. **C**
12. **B**
13. **C**
14. **B**

Objective: SWBAT define entropy

Notes - Entropy

- **Entropy** is a measure of the RANDOMNESS or DISORDER of the substances in a reaction
- The greater the TEMPERATURE, the HIGHER THE ENTROPY.
- Draw the particle diagrams for the three phases of water. Use a solid dot to represent one molecule of water!

Objective: SWBAT define entropy

Stop and Jot

Answer the following in a COMPLETE sentence.

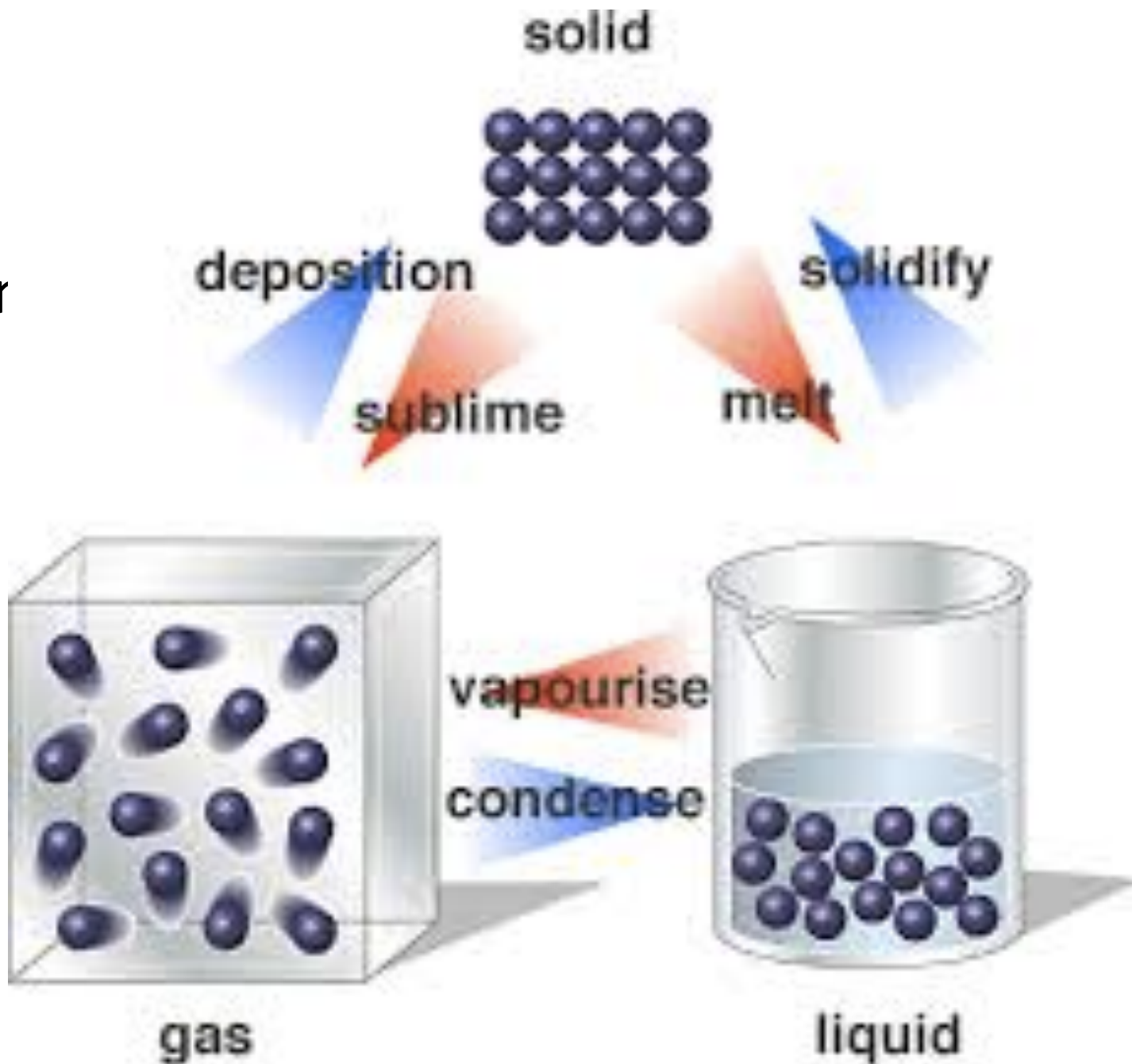
- Which of the following phases of matter has the greatest entropy (hint: first remember the three states of matter)? _____
- Which phase of matter has the least amount of entropy? _____

Objective: SWBAT define entropy

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potential energy diagram.

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Notes - Entropy

- Systems tend to undergo changes to lower energy and higher entropy



"I blame entropy."

Objective: SWBAT define entropy

Practice

- **Practice: State whether entropy increases or decreases.**

Process/ Reaction	Increase or decrease in entropy?
Ice melting	
Organizing your chem notebook	
Sublimation	
Deposition	

Objective: SWBAT define entropy

Show me your FINGERS!

1. Given the balanced equation:



As a sample of $\text{I}_2(\text{s})$ sublimes to $\text{I}_2(\text{g})$, the entropy of the sample:

- ① increases because the particles are less randomly arranged
- ② increases because the particles are more randomly arranged
- ③ decreases because the particles are less randomly arranged
- ④ decreases because the particles are more randomly arranged

Classwork

- Complete your 7.6 classwork!

Objective: SWBAT define entropy

Exit Ticket

- Complete

Objective: SWBAT define entropy

HOMEWORK

Complete the 7.6 Review Sheet!

Study for your Unit 7 TEST on Thursday!

Objective: SWBAT define entropy