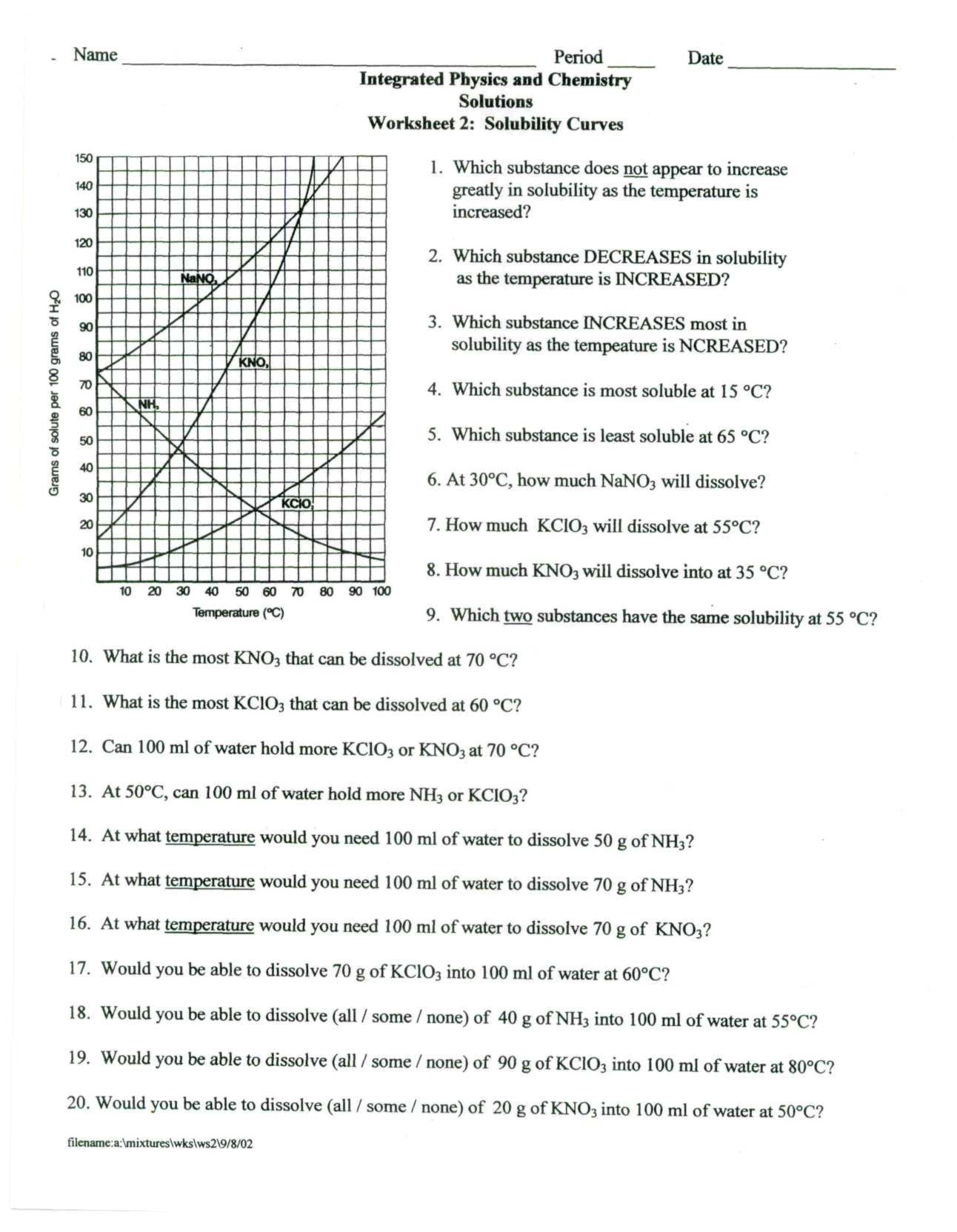
**WS #2 Solubility** Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Period \_\_\_\_\_



1a. Which substance decreases in solubility as the temperature increases?

b. What state of matter would you predict this substance to be? 

2. Which substance increases the most in solubility as the temperature is increased?   


3. Which substance is the most soluble at 15⁰C? 

4. Which substance is the least soluble at 65⁰C?

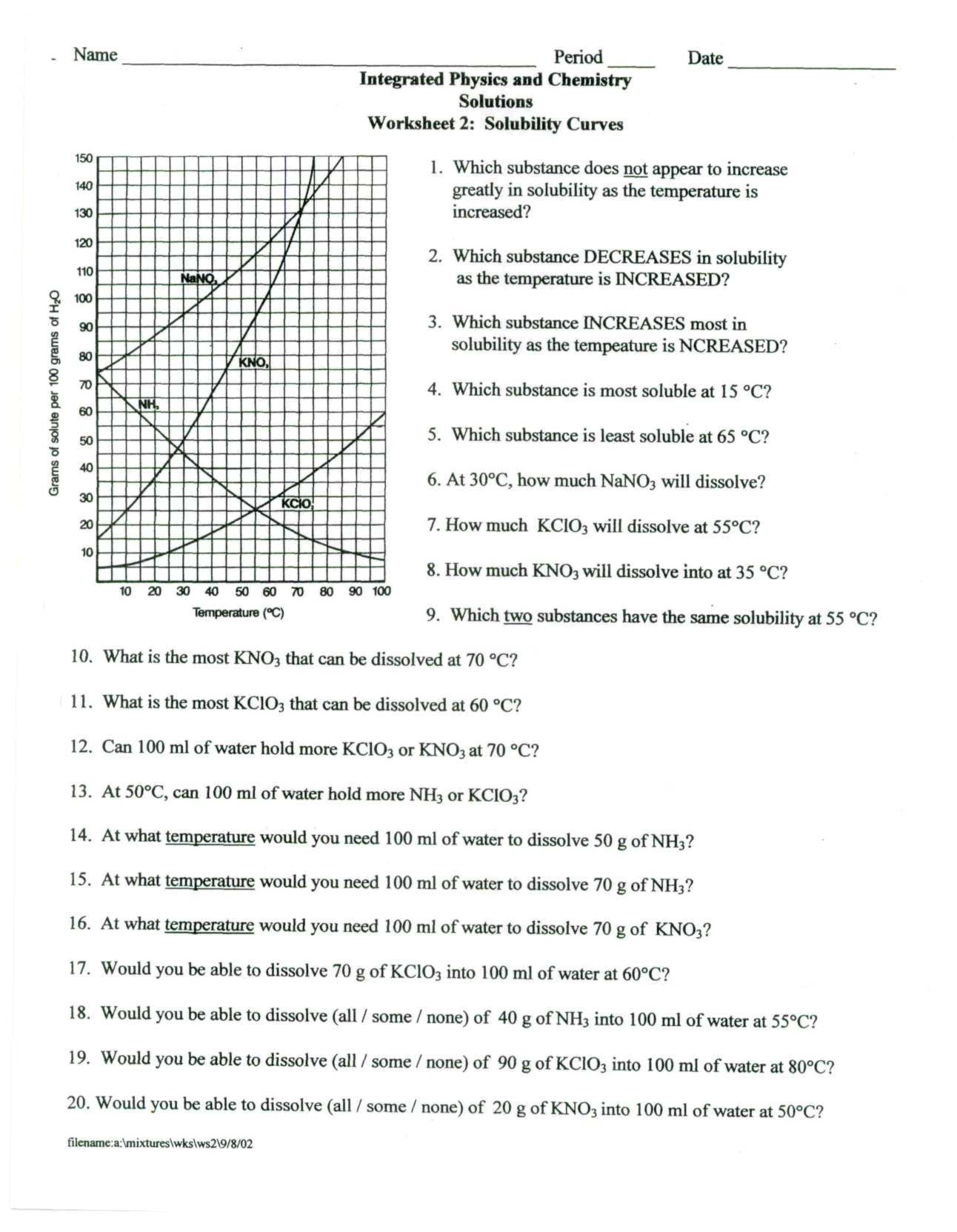
5. How much NaNO3 will dissolve at 30⁰C?

6. How much KClO3 will dissolve at 55⁰C?

7. How much KNO3 will dissolve at 35⁰C?

8. Which two substances have the same solubility at 55⁰C?

9. What is the most KNO3 that can be dissolved at 70⁰C?



10. What is the most KClO3 that can be dissolved at 60⁰C?

11. Can 100 mL of water (100 grams) hold more NH3 or KNO3 at 70⁰C?

12. At 50⁰C, can 100 mL of water hold more NH3 or KClO3?

13. At what temperature would you need 100 mL of water to dissolve 50 g of NH3?

14. At what temperature would you need 100 mL of water to dissolve 70 g of NH3?

15. At what temperature would you need 100 mL of water to dissolve 70 g of KNO3?

16. Would you be able to dissolve 70 g of KClO3 into 100 mL of water at 60⁰C?

17. 40 g of NH3 was put into 100 mL of 55⁰C water. ( All Some ) of it will dissolve.

18. 90 g of KClO3 was put into 100 mL of 80⁰C water. ( All Some ) of it will dissolve.

19. 20 g of KNO3 was put into 100 mL of 50⁰C water. ( All Some ) of it will dissolve.