

Name \_\_\_\_\_

## Extraction Check Answer Key

1. Procedure Two is safer because it does not use a hot plate and requires no insulated gloves.
2. Procedure Two is more accurate because filtering removes impurities before crystal formation, making the sample purer.
3. Procedure One is more efficient because heating evaporates water faster than air drying.
4. Procedure One limitation: risk of burns or boiling over. Procedure Two limitation: takes many hours to evaporate.
5. Answers will vary. A common correct response: Procedure Two because it avoids heat and reduces safety risks.

### Teacher's Guide

- Use this worksheet to build skills in **evaluating procedures** for safety, accuracy, and efficiency.
- For differentiation, provide a three column chart labeled safer, more accurate, more efficient to help students organize evidence.
- For engagement, have students model evaporation with warm air versus cool air using small water samples.
- For extension, challenge students to design a **third procedure** that combines advantages from both methods.
- For advanced learners, ask them to evaluate how each method might scale in an industrial setting.
- For struggling readers, highlight key equipment terms such as hot plate, filter, and insulated gloves before they read.