

Name: _____

Date: _____

Significant Figures in Measurements and Calculations Worksheet

1. Determine the number of significant figures in each of the following measurements:

- | | |
|----------------------------|------------------------------|
| a. 14.35 g | ii. 2000 cm |
| b. 0.0037 g | iii. 20000 cm |
| c. 100.000 | iv. 1.00 x 10 ³ g |
| d. 1.000 x 10 ³ | v. 1.00 x 10 ³ g |
| e. 0.000 g | vi. 0.00000 g |
| f. 0.000 g | vii. 0.000000 g |
| g. 0.00000 | viii. 0.0000000 g |
| h. 0.000000 | ix. 0.00000000 g |
| i. 0.0000000 | x. 0.000000000 g |

2. Add the following measurements and express the answer with the correct number of significant figures:

- | |
|--|
| ii. 40.00 + 100.00 + 1.0000 |
| iii. 0.0000 + 0.0000 + 0.0000 |
| iv. 1.000 + 1.0000 + 1.0000 + 1.00000 |
| v. 0.0000 + 0.00000 + 0.000000 + 0.0000000 |
| vi. 0.0000 + 0.00000 + 0.000000 + 0.0000000 |
| vii. 0.0000 + 0.00000 + 0.000000 + 0.0000000 |
| viii. 0.00000 + 0.000000 + 0.0000000 + 0.00000000 |
| ix. 0.000000 + 0.0000000 + 0.00000000 + 0.000000000 |
| x. 0.0000000 + 0.00000000 + 0.000000000 + 0.0000000000 |

3. Subtract the following measurements and express the answer with the correct number of significant figures:

- | | |
|-------------------------|---------------------------|
| ii. 0.000000 - 0.000000 | iii. 0.000000 - 0.000000 |
| iv. 0.000000 - 0.000000 | vi. 0.000000 - 0.000000 |
| v. 0.000000 - 0.000000 | viii. 0.000000 - 0.000000 |

4. Multiply the following:

- | | |
|----------------------------|---------------------------|
| ii. 0.000000 x 0.000000 | iii. 0.000000 x 0.000000 |
| iv. 0.000000 x 0.000000 | v. 0.000000 x 0.000000 |
| vi. 0.000000 x 0.000000 | vii. 0.000000 x 0.000000 |
| viii. 0.000000 x 0.000000 | ix. 0.000000 x 0.000000 |
| x. 0.000000 x 0.000000 | xi. 0.000000 x 0.000000 |
| xii. 0.000000 x 0.000000 | xiii. 0.000000 x 0.000000 |
| xiv. 0.000000 x 0.000000 | xv. 0.000000 x 0.000000 |
| xvi. 0.000000 x 0.000000 | xvii. 0.000000 x 0.000000 |
| xviii. 0.000000 x 0.000000 | xix. 0.000000 x 0.000000 |
| xx. 0.000000 x 0.000000 | xxi. 0.000000 x 0.000000 |

5. Divide the following measurements and express the answer with the correct number of significant figures:

- | | |
|-------------------------|--------------------------|
| ii. 0.000000 / 0.000000 | iii. 0.000000 / 0.000000 |
| iv. 0.000000 / 0.000000 | v. 0.000000 / 0.000000 |
| vi. 0.000000 / 0.000000 | vii. 0.000000 / 0.000000 |