1. Construct the paper sundial according to the instructions on the sheet.

2. On a sunny day, set up the sundial as carefully as possible with the pencil pointing north. (Sometime between mid morning and mid afternoon is best.)

3. Write down the sundial time to the nearest 5 minutes:

4. Write down the clock time (from a watch, cellphone, etc.) to the nearest minute:

5. What reasons can you think of for the two times being different? Give several.

6. What do you think is likely causing the largest time difference? Briefly explain.

7. The pencil is tilted over at approximately what angle (between 0° and 90°)?

8. What is the name for the part of the sundial represented by the pencil? (Use any reference.)