

## Counting Stars Recording Sheet

Use this sheet to record your results from the 'Counting Stars' activity.

School's Postcode	Result 1	Result 2	Result 3	Result 4	Result 5	Total

Total number of stars seen,  $N$

The average number of stars seen through your tube,  $n$   $n = \frac{N}{5} =$

Measure the diameter,  $d$ , of your tube (in mm)

Measure the length,  $l$ , of your tube (in mm)

You see a fraction,  $F$ , of the sky equal to  $F = \frac{1}{8} \left(\frac{d}{l}\right)^2 =$

So to calculate the total number of stars visible in your syk (one hemisphere),  $T_{hemisphere}$   
 $T_{hemisphere} = N \times \frac{1}{F} =$

So, the number of stars visible around the whole sky (both hemispheres),  $T_{whole}$   
 $T_{whole} = T_{hemisphere} \times 2 =$

Remember:

- Give your eyes a few minutes to adjust to the darkness before you start counting.
- Keep your tube as still as you can when counting.
- Try to find 5 different parts of the night sky that are free of clouds.