

Lighthouse Spreadsheet

Download the **lighthouse spreadsheet** and open it in **Excel**

Take a look at the spreadsheet. It contains information about lighthouses in Norfolk and Suffolk

Remember, the spreadsheet is a big table made up of cells

- **columns** go **down** the screen
- **rows** go **across** the screen
- **cells** are located using their coordinates – so **cell A2** contains the word **Lowestoft**

Correct the spreadsheet

There are some errors in the spreadsheet. You need to make some corrections:

1. The date that Lowestoft lighthouse opened is wrong. It should be **1874**
 - a. Click in cell **D2**
 - b. Type the correct date (**1874**). Then press **Enter**
 - c. The date will change
2. Use the same method to make these corrections:
 - a. **Winterton** lighthouse closed in **1921** (cell **E6**)
 - b. **Cromer** is in **Norfolk**, not in Suffolk (cell **B7**)
 - c. **Old Hunstanton** lighthouse is not working. Change cell **F8** to **FALSE**
 - d. Change cell **A3** to read **Gorleston range rear** – there are two lighthouses in Gorleston so it's important be able to tell them apart

Adding information

There is also some information missing from the lighthouse. You will need to find out the right answer (hint: Wikipedia is an excellent source for this)

3. In cell **G3** enter the **height in metres** of **Gorleston range rear** lighthouse
4. In cell **H11** enter the range of the light for **Southwold lighthouse** in **kilometres (km)**
5. Cell **J7** is blank. Find out something interesting about **Cromer lighthouse** and add it

Questions from the spreadsheet

Now, I have some questions for you to answer. Use only the spreadsheet to get your answers:

1. How **tall** is Lowestoft lighthouse?
2. What data is in cell **H3**?
3. How far is the **range** of Happisburgh lighthouse?
4. Which lighthouse is in **row 5** of the spreadsheet?
5. What is the **flash pattern** for Southwold lighthouse?
6. Which is the **oldest** lighthouse on the spreadsheet?
7. Which is the **tallest** lighthouse on the spreadsheet?
8. Which lighthouse on the spreadsheet has the **greatest range**?
9. How many of the lighthouses are working today?
10. Which lighthouse can be visited as a tourist attraction?

Using Functions in spreadsheets

There is a way to make it easier to answer some of these questions. Here's a way to find out the tallest lighthouse easily

1. **IMPORTANT:** Click in cell **G12**
2. At the **top right**, find the **SUM** button and click it
3. Choose **Max**
4. Cell G12 should now say **=MAX(G2:G11)**
5. Press **Enter** (Return) on the keyboard
6. The number 31 should appear in cell **E2**
7. Use the **Min function** in cell **D12** to help find the date that the first lighthouse was built
8. Try using **Count Numbers** in cell **E12** to find out how many lighthouses are closed (hint: you'll need to be a bit clever here)

