

Construction – Build your skills Worksheet

Learning outcomes

Use your skills to design a floor plan of a busy office and then build a mini structure of what this could look like.

Activity

Introduction

A large bank has decided that they need a new office building for their technical roles. You have been given the job of designing and building this.

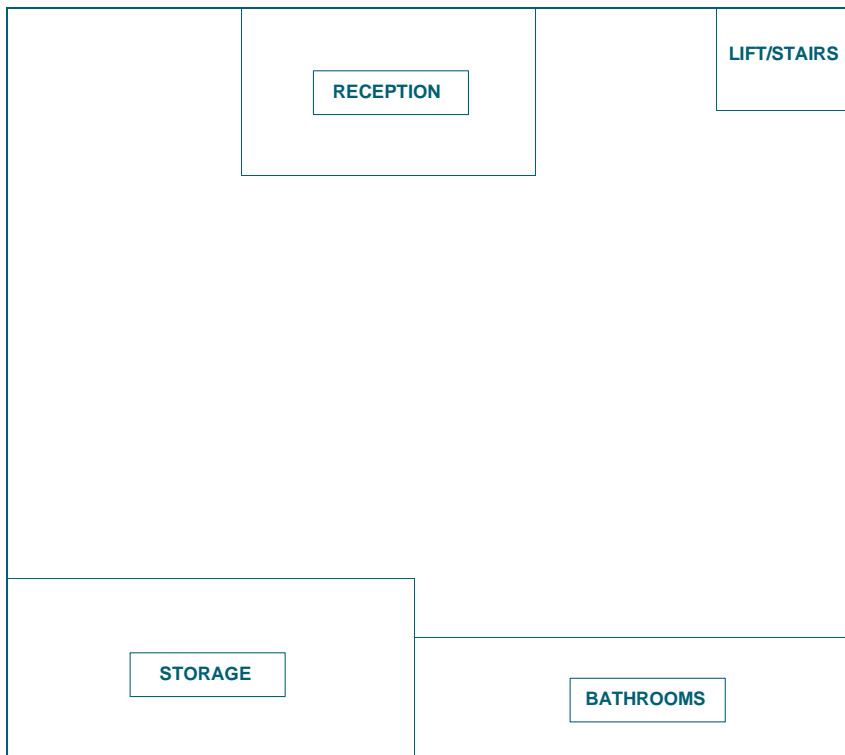
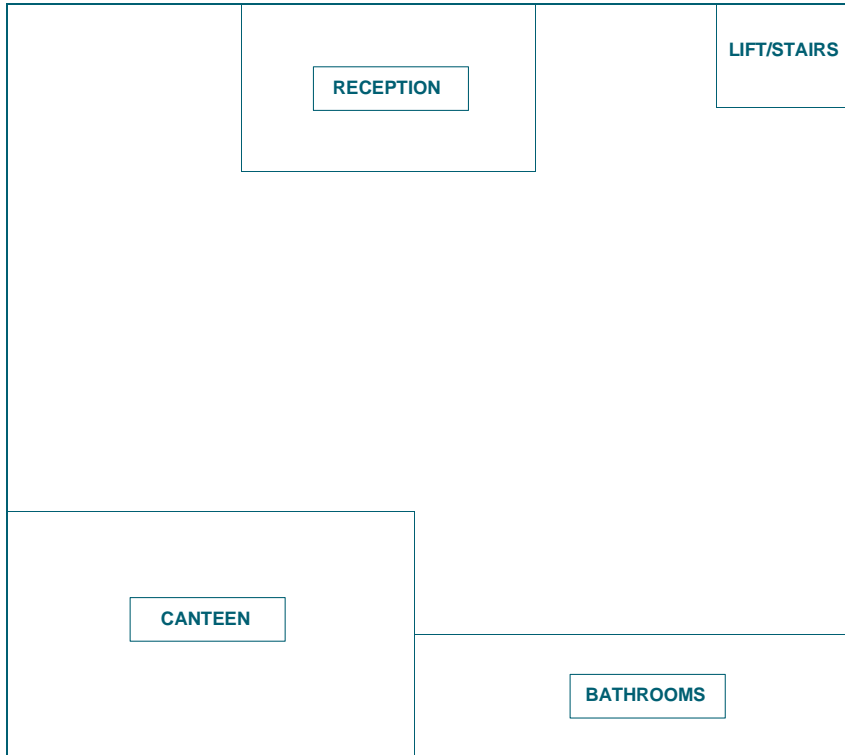
The building is going to house 80 members of staff. It needs to have some meeting spaces, bathrooms and dining areas, as well as a canteen where staff can buy their lunch. There will also need to be some storage for the various kinds of IT equipment.

This should be over 2 floors with 40 members of staff on each floor.

Activity on next page...

Activity 1

Using a ruler, can you draw, on the floor plan below, squares to represent 40 desks on the first floor? Number these as you go. All the desks need to be the same size. If you haven't printed the worksheet, draw the floor plan onto a sheet of paper before completing the activity.



Activity 2

Do you have a tape measure? Do you know how it works?

Can you measure a room in your house with it? You can ask an adult to help with this.

Length:

Width:

Activity 3

Now, let's try to build a small-scale model of what the office building it might look like from the outside. You should take 20 minutes to build a structure using household items.

These are some ideas of what you can use for your building but be as creative as you like! Don't make your model too big!

- ★ Straws
- ★ Blue Tack
- ★ Dried Spaghetti
- ★ Sellotape
- ★ Old cereal/food boxes
- ★ Toilet roll tubes
- ★ Paper
- ★ Felt tip pens/crayons/colouring pencils

Once you have finished this, use a ruler or tape measure to measure the height/width of your building.

- ★ How does this compare to the size that the real building would be?
- ★ Do you think it will work with your floor plans?
- ★ If not, what changes could you make, either to the outside or floor plan to make them work together?
- ★ What skills have you used in this activity today?

Some of the jobs that use these skills are an architect, scaffolder and a town planner. Learn more about them using these links to My World of Work.

[Architect](#) (1)

[Scaffolder](#) (2)

[Town planner](#) (3)

You can also find out about lots of other job roles at [My World of Work](#) (4).

Website References

1. Architect <https://bit.ly/3cQudMb>
2. Scaffolder <https://bit.ly/2zSzuEw>
3. Town Planner <https://bit.ly/2WL0gHG>
4. My World of Work <https://www.myworldofwork.co.uk/>