

## Dutch couple become Europe's first inhabitants of a 3D-printed house

**Level:** Advanced – Teacher's notes

**Article summary:** The article describes how the first 3D-printed house in Europe was built.

**Time:** 45 – 60 minutes

**Skills:** Reading, Speaking, Writing

**Language focus:** Vocabulary

**Materials needed:** One copy of the worksheet per student

**Key:**

1. tenants
2. bunker
3. boulder
4. plot
5. nascent
6. proliferate
7. nozzle
8. overhanging
9. squirt
10. texture
11. bricklayer
12. touch
13. fairytale
14. affordable

### 1. Warmer

- a. The purpose of this activity is to introduce the topic of accommodation and get students thinking about the advantages and disadvantages of different types of accommodation. Ask students to put the accommodation types into order from their favourite to the one they like least and to think about their reasons for choosing that order. Point out that a terraced house is one that is part of a row of buildings, so it has a building on either side of it without any space between it and them.

### 2. Key words

- a. Ask students to do the exercise individually and then compare their answers in pairs or small groups. Point out that a nozzle can also be found on their home printers and is also the term used for the part of a petrol pump that drivers insert into their petrol tank when filling their car with fuel. Highlight the fact that a tenant is someone who lives in a rented property. People who live in properties they own themselves are owner-occupiers. Point out that 'finishing touch' is usually used in the plural, as in 'The artist was just applying the finishing touches to the painting'. The word 'nascent' also collocates with words such as industry, democracy and political movement.

### 3. Comprehension check

- a. The answers given are only suggested answers and students may correctly answer the questions in different ways, e.g. in #1 they may simply say 'electronically' or similar.

**Key:**

1. By using a digital key.
2. France and the USA.
3. It's the first one where the load-bearing walls have been made by 3D printing.
4. Overhanging external walls.
5. By adding layer upon layer.
6. By reducing the amount of cement that is used.
7. 120 hours.
8. €800 a month.
9. That you can make any shape you want to make.
10. It will give them control over the shape of their houses.

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### 4. Key language

- a. Students could be asked to do this exercise individually and then compare their answers in pairs. Note that 'there is only one solution that uses all the words. Ask students to refer back to the text to check their answers.

**Key:**

1. e
2. h
3. b
4. f
5. a
6. g
7. c
8. d

### 5. Discussion

- a. Allow students time to note down their ideas about each statement and encourage them to say why they agree or disagree with each one.

### 6. In your own words

- a. Ask students to open an Internet search engine and enter either 'uses of 3D printing' or 'products made by 3D printing'. They should collect information about at least five uses of 3D printing or products made using this method. Encourage them to focus on uses they find surprising. Both the preparation and the writing could be done as homework activities.

The results could either be corrected as a piece of writing or students could use the information to make a short presentation about 3D printing to the group.