1. Table 1.1 shows some names of the parts of the fermenter and their functions.



 Complete Table 1.1.

 One row has been done for you.

**Table 1.1**

|  |  |  |
| --- | --- | --- |
| letter from Fig. 1.1 | name  | Function |
|  | water jacket |  |
| **S** |  |  |
|  | nutrient inlet |  |
| **R** |  |  |
|  | air supply |  |
| **T** | outlet | allows collection of the liquid containingpenicillin after fermentation |

1. One product that is made in fermenters is the antibiotic penicillin. This is made by a fungus called Penicillium. The fungus is made up of long threads called hyphae.
2. Explain what an antibiotic is used for.

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1. Carbohydrates and amino acids are added to the fermenter. Explain why both of these substances are added.

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1. The fermenters in which Penicillium is cultivated do not usually have paddles. Suggest why.

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