

## Grade 7 Natural Science Worksheet

### Assessment Task: Botony: flowers

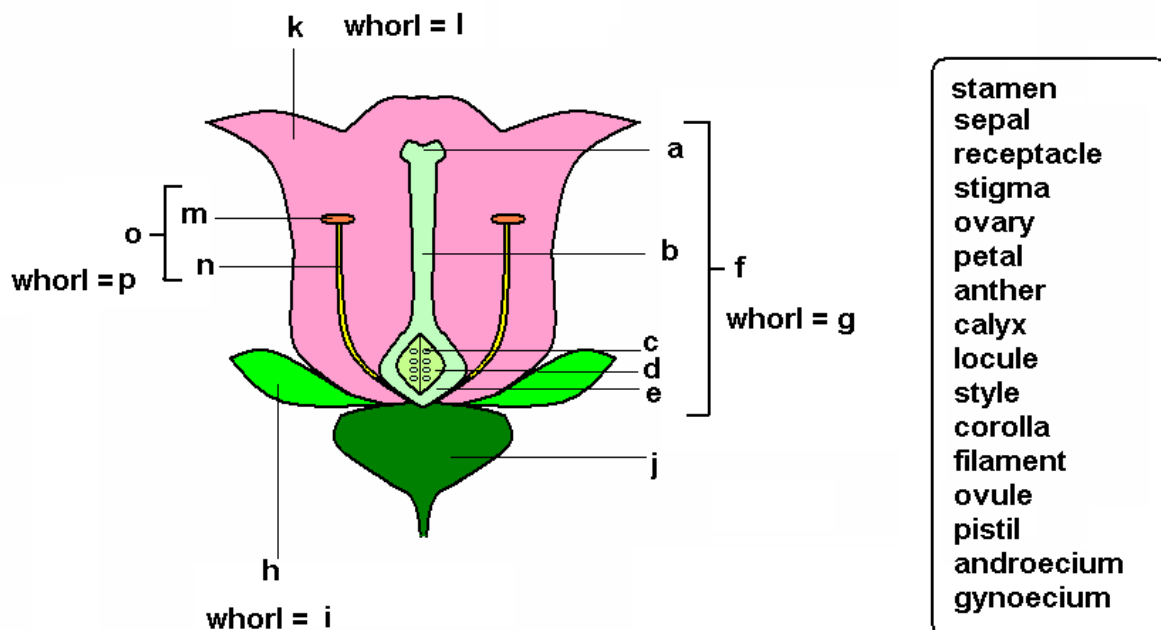
#### The flower

The flowering plants have evolved a specialised organ that brings about sexual reproduction. This specialised organ is the **flower**.

#### Part One: A diagram of the flower

Write the letters a – p down the margin of your page.

Provide a key for the diagram of the flower. Answers can be found in the box alongside the diagram. [16 marks]



#### The different parts of the flower

#### Part Two: Structure and function of the flower

Produce a table which summarises the structure and function of the different whorls of the flower.

[10 marks]

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### Part Three: Some 'vegetables' are actually fruits

Many of the vegetables you eat are actually fruits. If it has seeds (or "pips") in it – it is a fruit. Decide which of the following are fruits. Those that are not fruits, say from which part of the plant they are derived.

Tomato, grape, cucumber, cabbage, strawberry, potato, carrot, pumpkin, pea, cauliflower, brussel sprout, bean, lettuce, peach, watermelon, onion, squash, marrow.

[18 marks]

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### Suggested Solutions

Question number	Possible marks	Solution												
1	16	a stigma b style c ovule d locule e ovary f pistil g gynoecium h sepal i calyx j receptacle k petal l corolla m anther n filament o stamen p androecium												
2	10	<table border="1"> <thead> <tr> <th>Structure</th> <th>Function</th> </tr> </thead> <tbody> <tr> <td>Receptacle</td> <td>Support ✓✓</td> </tr> <tr> <td>Calyx (sepals)</td> <td>Protection of bud and support of flower ✓✓</td> </tr> <tr> <td>Corolla (petals)</td> <td>Attract pollinators ✓✓</td> </tr> <tr> <td>Androecium (stamens)</td> <td>Produce pollen (male gamete) ✓✓</td> </tr> <tr> <td>Gynoecium (pistil)</td> <td>Produce ovules (female gametes) and bring about fertilisation ✓✓</td> </tr> </tbody> </table>	Structure	Function	Receptacle	Support ✓✓	Calyx (sepals)	Protection of bud and support of flower ✓✓	Corolla (petals)	Attract pollinators ✓✓	Androecium (stamens)	Produce pollen (male gamete) ✓✓	Gynoecium (pistil)	Produce ovules (female gametes) and bring about fertilisation ✓✓
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3	18	Fruits: Tomato, grape, cucumber, strawberry, pumpkin, pea, bean, peach, watermelon, squash, marrow. ✓ one mark each = 11  Cabbage – leaves ✓ Potato – stem ✓ Carrot – root ✓ Cauliflower – bud ✓ Brussel sprout – bud ✓ Lettuce – leaves ✓ Onion – stem ✓												