Ri Off the Shelf Masterclass: Football Manager

Worksheet 1 – Building a decision tree - Solutions

Decision trees have lots in common with real trees!

1. For the decision tree below, **label** the **root node**, the **branches**, the **decision nodes**, and the **leaf nodes**. One has already been labelled for you. Once you have finished labelling, follow the route of the decision tree to find which football position may suit you best!

Branch

**Do you like passing the ball?**

**Do you like running?**

**Defender**

**Goalkeeper**

Yes

No

**Do you like scoring goals?**

Yes

No

Yes

No

**Midfielder**

**Striker**

Branch

Root Node

Branch

Decision Node

Branch

Branch

Leaf Node

Leaf Node



The position that suits me best is \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_

2. The decision tree below is missing some words. Get creative and complete the decision tree. When you have finished, follow the decision tree to the end to find which sport you may want to try.

**Are you good at batting?**

**Do enjoy the outdoors?**

**Golf**

Gaming

Yes

No

**Do you prefer team sports or individual sports?**

Team

Individual

Yes

No

**Cricket**

**Are you better at catching or kicking?**

Catching

Kicking

Football

Netball

The sport I should try is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

3. On a blank piece of paper, create your own decision tree. You could make a decision tree that decides:

* Whether or not to play football outside
* What to wear to football practice
* What snack to eat after playing a sport
* How to celebrate after scoring a goal
* Or your own choice!

You can make your decision tree as complex as you wish, but your tree will need to include at least one root node and one decision node.