Validation for Investigation

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Mark /14

1. What was the independent variable in this latest investigation? (1 mark)
2. What was the dependent variable in this latest investigation? (1 mark)
3. State two controlled variable for this latest investigation? ( 1mark)
4. This investigation could be altered and redone with the following aim.

Aim: To find out if the flexibility in the lower back and legs of humans is different between people younger than 20 years of age, compared to people over 40 years of age.

1. For this version of the investigation what is the independent variable?( 1mark)
2. What is the dependent variable? (1 mark)
3. State a hypothesis for this investigation. ( 2 marks)
4. On the next page are the results of this investigation. The people being tested were asked to sit on the floor and reach forward. The distance that the people could reach past their toes was measured. Draw a suitable graph of the results. ( 5 marks)

|  |  |  |
| --- | --- | --- |
| Name | Age  (years) | Flexibility  (cm) |
| John | 19 | 10 |
| Jim | 17 | 2 |
| Jenny | 18 | 7 |
| Jack | 18 | 12 |
| Annie | 19 | 9 |
|  |  |  |
|  |  |  |
| Craig | 41 | 0 |
| Sandy | 44 | 2 |
| Lam | 43 | 14 |
| Jasper | 41 | 4 |
| Roddy | 47 | 4 |
|  |  |  |
|  |  |  |

1. How could the results have been made more accurate?(1 mark)
2. What is your conclusion for the experiment? (1 mark)