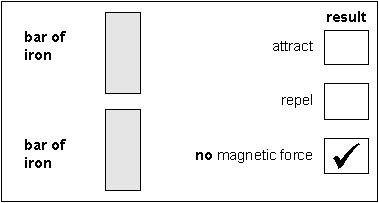
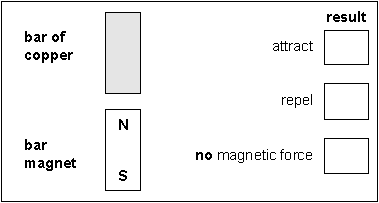
**Q1.**

David put two bars of iron close to each other.  
There was **no** magnetic force between them.  
David recorded the result as shown below.



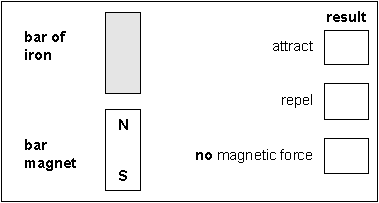
(a)     David did three other tests.  
Tick the correct box to show the result for each test.

(i)



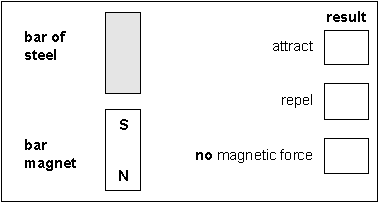
1 mark

(ii)



1 mark

(iii)



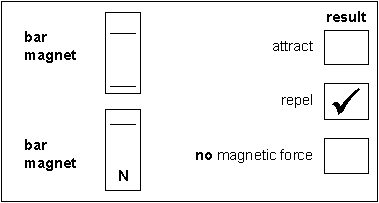
1 mark

(b)     David then did two experiments with magnets.

The tick in each box shows David’s results in each experiment.

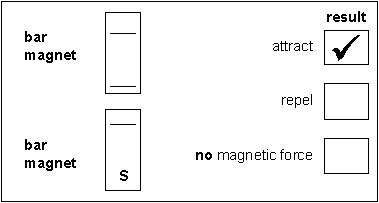
Label the missing poles on **each** magnet to match David’s results.

(i)



1 mark

(ii)



1 mark

maximum 5 marks

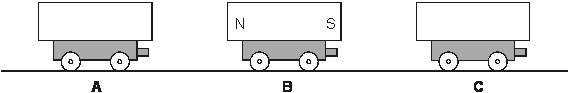
**Q2.**

The diagram below shows three trolleys.  
Peter put a bar magnet on each trolley.

(a)     He pushed trolleys A, B and C together.

•    Magnet B **attracted** magnet A.

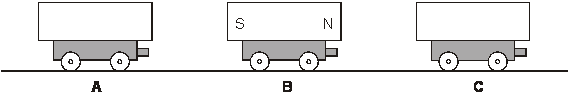
•    Magnet B **repelled** magnet C.



**On the diagram above**, label the north and south poles of   
magnets A and C.  
Use the letters N and S.

2 marks

(b)     Peter turned trolley B around. Trolleys A and C were **not** turned around.



          What would happen now when Peter pushed them all together?  
Use either **attract** or **repel** to complete each sentence below.

          Magnet B would .................................... magnet A.

          Magnet B would .................................... magnet C.

1 mark

(c)     Peter held two trolleys close together and then let go.



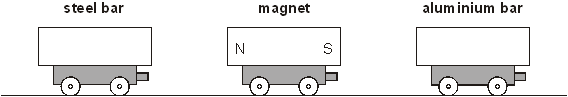
          The magnets repelled each other.

**Draw an arrow** on both magnets to show which way they would move.

1 mark

(d)     Peter took a magnet, a steel bar and an aluminium bar.

          He put them on three trolleys as shown below.



(i)      What happens to the steel bar as he moves it closer to the magnet?

...............................................................................................................

1 mark

(ii)     What happens to the aluminium bar as he moves it closer to the magnet?

...............................................................................................................

1 mark

maximum 6 marks