1. Draw the probability tree

First pick second pick outcomes

5/9 B………………….. (B, B)

6/10 B

4/9 Y………………….. (B, Y)

4/10 6/9 B…………………… (Y, B)

Y

3/9 Y……………………….. (Y, Y)

1. what is the probability of picking :  
   1)the first plate blue and the second plate yellow

P (B, Y)

=6/10\*4/9=24/90

2) Both plates yellow

P(Y, Y)

=4/10\*3/9=12/90

3)1 blue plate and one yellow plate

P (B, Y) or (Y, B)

=6/10\*4/9 + 4/10\*6/9

=24/90 + 24/90= 48/90

4)2 plates of the same color.

P (B, B) OR (Y, Y)

=6/10 \* 5/9 + 4/10 \* 3/9

=30/90 + 12/90 = 42/90

5) At least 1 blue plate.

P (B, Y) OR (B, B) OR (Y, B)

= 6/10\*4/9 + 6/10\*5/9 + 4/10\*6/9

=24/90 + 30/90 + 24/90

=78/90