Question One

This is quite a tricky question and the answer is not entirely clear. The best way to identify the structure of the argument. Here, it is: A has an unjustified benefit (i.e. tax non-payment) which B does not have. Now, B has tried to claim the same benefit. However, if the benefit is unjustified for A, it is unjustified for B and therefore B should not try to claim it.

If we go from E upwards, we can see that E is unlikely to be the answer. Its structure is: B has a lot less benefit than A. This could be the answer, but it doesn't really attack the principle of the argument (i.e. that tax evasion is unjustified).

The structure of D is: A can get the unjustified benefit another way. But again, this is broadly irrelevant to the principle of the argument. If the benefit is unjustified, you shouldn't try to get it just because A has it, even if A can get it another way too!

The structure of C is: B finds it harder to get the benefit than A. For the same reason as above, this doesn't attack the principle of the argument.

The structure of B is: if B does claim it, everyone will claim it and this will cause even more harm. This strengthens, rather than weakens, the argument, so it cannot be the answer.

The structure of A is: B is only claiming the unjustified benefit to force the government to also take it away from A. Finally! This does attack the principle - because it shows that B is claiming it as an *instrument* to minimise the unjustified benefit overall.

Answer is therefore A.

Question Two

As I mentioned, I think this question is poorly worded! What you need to imagine here is that Nathan is cutting four pieces of fabric out of a single larger piece.

First of all, although here the length is 38cm and the width is 15cm, you could turn it sideways so that the width would be 38cm and the length would be 15cm.

Secondly, the question tells us what we need four pieces of fabric. Therefore, the width of the overall fabric will need to be 4 x 38cm (which is 152cm). As we can see, the longest available length is 160cm, and it costs £2.80/metre. (This can cause confusion; what it means is that if the length were a metre, it would cost £2.80).

Thirdly, we are told that "material may be bought in lengths which are exact multiples of 10cm". As our length is 15cm, we'll need to find the nearest length divisible by 10 above this, which is 20.

Fourthly, if the price/metre of the 160cm material is £2.80 and we want 20cm length of it, then we need only divide £2.80 by 5. This gives us the answe of 56p! (B)

Question Three

Another very tricky question! One of the easiest ways to work this out is just to set out roughly what conditions must be true from the pie chart.

Condition 1: Adventure Playground must be (roughly) a quarter of the total.

Condition 2: Theme Park must be the largest overall segment.

Condition 3: Adventure Playground + Museum + Farm should be a little under half.

Condition 4: Theme Park > Adventure Playground > Steam Train Excursion > Farm > Museum

A must be wrong because it shows steam train excursion and farm as only 5 units apart (or 2% different). In fact, we can see that steam train is a fair amount bigger.

B must be wrong because we can see that theme park is a fair amount over 25%, but it is shown as only 2 units (or c.1% greater than 25%). Moreover, it shows (farm + museum) as larger than Theme Park, which is clearly not correct from the chart.

C must be wrong because Museum + Farm should roughly equal a quarter, whereas here they sum to 35/200, which is not enough.

D must be wrong because, although the Theme Park is grater than a quarter, it doesn't look as big as a third of the overall pie chart, which is what 40/120 would be. It also shows museum and farm as the same proportion, which they clearly are not.

Therefore, the answer must be E!

Question 4

One of the giveaways for "underlying assumption" questions is often the last couple of sentences and signalling words like "therefore", "so", or "as a result". Here, the argument structure is: X is commonly accepted but bad. Y tells us to accept X. Therefore, Y has worked. When we cut the argument down to this size, we can quite quickly see that the answer must be B, because one of the fundamental assumptions in the above argument is that Y is capable of influencing or causing X to occur. To put it another way, we might respond to the above argument by attacking the underlying assumption and saying that people don't change their behaviour according to what politicians say!

Question 5

As always, it is best to chop the argument down to size. Here, X (i.e. the police) often hold wrong views (i.e. not based on evidence) and are more confident than public about the wrong views. Training can permanently reduce this problem. Therefore, X should have more training.

Looking through the answers, we should therefore be looking for a fact which strengthens either (a) the idea that police hold wrong views or (b) the idea that wrong views cause harm. As it happens, E tells us the latter: police who hold wrong views are more likely to have complaints made against them. Here, having a complaint made against a police officer is obviously a negative outcome, and causing their views to be more evidence-based would be a benefit. Therefore, the answer is E.

Question Six

As you all know, I hate these net questions but thankfully you are all very good at them! One way to work it out is to work out what numbers should be on the various sides of the big "T" panel, when it is the right way up and you are looking at the prism "straight on".

On the left centre will be 1.
On the left upper diagonal will be 2.
On the right upper diagonal will be 3.
On the left lower diagonal will be 6.
On the right lower diagonal will be 5.
On the right centre will be 4.

The "centre panels" will be 1 and 4. We can immediately see that A has 6 and 1 as centre panels, B has 5, and E has 5. They are therefore disqualified.

The question is therefore whether it is C or D. If you look at the original net, you will see that the top of the "1" and the "4" should be closer to the T than the "8". In D, when you fold it round, the top of the "4" will clearly be closer to the "8". Therefore, the answer is C.

Question Seven

The structure of the argument here is: [Cake Tasty] only if [Fresh Ingredients]. You do not have [Fresh Ingredients] therefore not [Cake Tasty].

So: X only if Y. Not-Y therefore Not-X.

The structure of A is: X only if Y. Y therefore X.

The structure of B is: X or Y. Not-Y therefore X.

The structure of C is: If X then Y. Y therefore X.

The structure of D is: If X (listening to loud music) then Y. Not-Y therefore Not-X.

The structure of E is: X only if Y. Not-Y therefore Not-X.

Note that the difference between D and E is the "only if" component. In D, there are lots of ways to damage your hearing! However, in E, good knowledge of the car is necessary for fixing it - you cannot fix it without it.

Question Eight

Here you can start at the end of the question and work back.

1. I need 550g of sourdough (500g for recipe, 50g leftover)
2. Every 24 hours, 24g of water evaporates.
3. On Monday 8am, I have 100g of sourdough (50g water, 50g flour).
4. I have to get to 550g by adding equal amounts of flour and water and doubling.

Applying this method, at Tuesday 8am there will be 50g flour, 26g water, so 76g of sourdough. I then double that to get to 152g (adding (76/2)g of each, which is 38g. Now there is 64g of water).

On Wednesday, we subtract 24 then double so 2x (152 - 24) = 256.

On Thursday, we subtract 24 then double so 2x (256 - 24) = 464

On Friday we subtract 24 then double so 2x (464 - 24) = 880.

Therefore only on Friday do we have the required amount!

Question Nine

More nets! This time a process of elimination. A useful trick is to work out which sides will be "opposites". Here, IV will face III, V will face II, and I will face VI.

Similarly, the "III" and "V" will always point together either up or down.

If we therefore move from A to E, we can see that A is not the answer because the V should point away from the I, not towards it.

It is not B because the I should be parallel, not perpendicular, in rotation to IV.

It is not C because II should be perpendicular, and not parallel, in rotation to III.

It is not E because III and IV should be parallel, not perpendicular, in rotation to one another

Therefore, the answer must be D!

Question Ten

Did not cause (m)any difficulties. The trick with these questions is sometimes to see *why* a certain view is impossible. Here, everyone saw that the reason E is impossible is because it shows a line which "blocks in" the trench which runs through the back of the block, when we can clearly see that the trench runs all the way from top to bottom. Therefore, the answer is E.

Question Eleven

Some good answers to both questions. On the universality of human rights, the best points were probably about whether some rights are relative to economic and cultural conditions; others questioned whether there was a coherent idea of "human rights" to apply all around the world. Students could have gone further to deconstruct the question by asking what it means for a right to be "universal"; is it a mere normative statement that X "should" happen, or is recognition of human rights inextricably tied to requirements to act.

On the police front, more good answers. The best centred around the idea that we should be free from unreasonable stops and searches, and weighed this against the unlikely probability that police will discover something from a "random" check. Others discussed racism in this context, though few went further to say what other negatives to this might be, including lack of community trust.