Section C

Text 3

The text below is about recycling. Read it carefully and answer Questions 14 – 20.

1 Recycling comes with hidden costs. Sometimes those costs are higher than you think. On nearly every level of government from the federal all the way down to local, there is usually some form of recycling law or mandate. Several states, in fact, have gone as far as to require home recycling. But, as people become more educated with our collective impact on the environment, are we continuing to put an undue emphasis on recycling at the detriment of the other two modern recycling rudiments? Are we recycling when we should instead be reducing or simply reusing?

2 It would be foolish to claim that recycling is not an important part of the collective good that is conservation. Without the established recycling infrastructure, millions of tons of otherwise reusable materials would end up being buried in landfills or incinerated away to ash. If that number, millions of tons, sounds a little large, here's a smaller sample for you. In the 2005-2006 school year (the most recent available) Tufts University recycled 737 tonnes of cardboard and paper and 132 tonnes of bottles and cans. The reduction from one university is a good means to show how recycling collectively can have a dramatic reduction in the total amount of waste. Not too shabby.

3 Or is it? Yes, millions of tonnes of what would otherwise be refuse have been diverted from landfills around the nation. And judging from a quick walk down the paper isle of your local office supply store, a fair share of materials are making their way back to the market. And the use of recycled materials helps qualify somewhat for that second environmental pillar, "reuse." Somewhat, but perhaps not enough.

4 Let's take a look at the recycling process for your average aluminium can. After your can is picked up from either your curbside recycling bin or the local disposal centre, that can is handed off down a supply chain that varies in length based on bidders and geographical conditions. At some point, last night's can is ground up or shredded into chips. Those chips and grinds are then smelted down into molten metal and then formed into either bars or ingots that can be resold. Frequently these materials come back to us in the form of new parts of larger devices or new soda cans.

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5 As you can see, the process from old aluminium can to new aluminium can involves a great deal of transportation and processing. While the volume of materials being transported at once can reduce the overall carbon burden of the process, the sheer act of recycling can have an unforeseen negative impact on the environment. Abandoned dump sites can severely damage the surrounding environment as harmful chemicals in the trash can mix into water and soil. This causes one to think of the environmental savings of using an item constructed with post-production content not only in the initial resources it saved, but also in the energy and carbon that were otherwise expended to save the resources.

6 When small, easy to break down items like cans and newspapers are recycled and the materials are reused, the energy and carbon expenditures are relatively small due to the sheer volume of the materials. But what about larger items like computers, refrigerators, or cars? The resources required in collecting, moving, and breaking these devices down into raw materials that can be smelted and then reused are both intensive and costly, so much so that it is rarely done.

7 Thankfully, this is one instance where probability wins. When an aluminium can is empty, the point of failure is obvious. When a fridge or car is considered junk, failure isn't always so certain. Large, complex devices have a multitude of parts, any number of which could have been the reason for failure. What didn't cause the failure, however, is likely to still be usable. As these large devices are built on the Ford concept of interchangeable parts, there is likely a built-in market for that part. What's more, these parts are premade, so once they are cleaned up and quality-inspected, they are essentially ready to be resold, all without the resource and energy expenditures required to return these items to refined materials and then remanufacture them.

8 The lesson seems to be that going green is not as simple as the phrase "Reduce, Reuse, Recycle" makes it out to be. Recycling has its own inherent costs. Thus, what makes sense for cans does not necessarily make sense for cars. Sometimes, it's reuse before recycle.

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14 What does the writer mean by recycling 'comes with hidden costs' (line 1)?

..... [2]

15 What is the benefit of an 'established recycling infrastructure' (lines 10 – 11)?

..... [1]

16 What are two other ways of dealing with refuse?

..... [2]

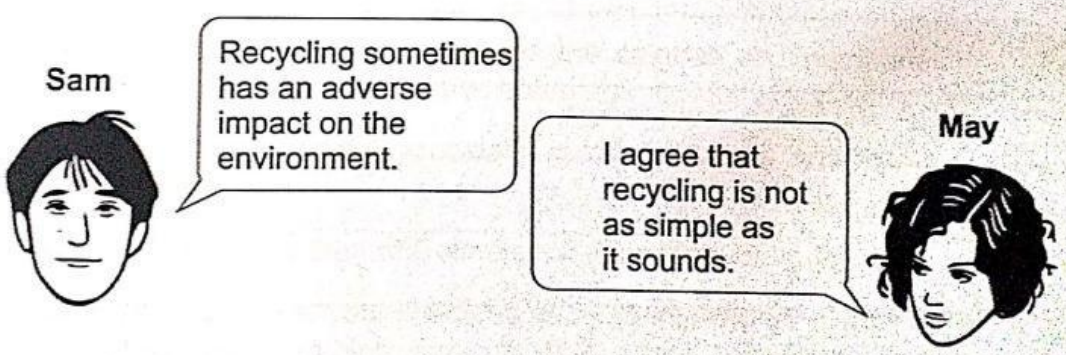
17 The refuse that has been 'diverted from landfills' (line 20) have been turned into 'recycled materials' (line 23). What are the 'recycled materials'?

..... [1]

18 What two factors affect the length of a supply chain in the recycling process?

..... [2]

19 Here is a part of a conversation between two students, Sam and May, who have read the article.



(i) How would Sam explain his position with reference to paragraph 5?

.....

..... [1]

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(ii) How would May justify her view with reference to paragraph 8?

.....

..... [1]

20 **Using your own words as far as possible**, summarise the advantages and disadvantages of recycling.

Use only information from paragraphs 2 to 5.

Your summary must be in continuous writing (not note form). It must not be longer than 80 words (not counting the words given to help you begin).

Recycling reduces the need for landfills .. ..

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..... [15]

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