
What happens inside those massive warehouses?

[listening test questions]

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Level: **** [B1/B2]

TED TALKS Link:

http://www.ted.com/talks/mick_mountz_the_hidden_world_of_box_packing?language=en

Check these words before listening:

Key vocabulary

1. A breakthrough
2. To pick, pack, ship
3. A package
4. An inventory
5. To assemble
6. A distribution setting / centre
7. Unproductive / unfulfilling
8. A material-handling provider
9. A nagging problem
10. To arrive at a notion
11. Products: Captain Crunch, Mountain dew, diet coke (google these)
12. Shelving
13. The opening ceremony of the Olympics (google this)
14. Peer-to-peer coordination
15. Emergence
16. Stock keeping Units (SKUs) – identification codes
17. To scan a barcode
18. A pod
19. Side-effects
20. Pervasive
21. Parallel processing
22. A conveyor belt
23. An algorithm
24. Valentine's day
25. Thermal map
26. Queuing
27. Idle time
28. Testimonials

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Student

TED Talks Test Questions

Time: *Approximately 1- 1:30 hours*

1. Read the title

- Try to predict the content of lecture
- Write down key terms / ideas
- Check key vocabulary using a dictionary

Try to listen ONLY two times

Three types of lesson

Lesson#1: [hard]

1. Listen once – take notes
2. Give 5 minutes to tidy notes
3. Listen again and add to notes (use a different **colour** pen).
4. Answer questions – set 20-25 minutes to answer.
5. Check answers
6. Listen again to check answers

Lesson #2: [medium]

1. Listen once – take notes.
2. Answer questions: 10-15 minutes
3. Listen again – answer the questions as they listen
4. Give yourself 10 minutes to tidy answers. Then check answers
5. Listen again to check answers

Lesson #3: [easier]

1. Read questions – highlight key terms
2. listen once and answer questions
3. 5 minutes to tidy notes
4. Listen again answer missed question
5. 5-10 minutes to tidy answers. Then check answers
6. Listen again to check answers

Teacher

TED Talks comprehension questions

Lesson Plan

Aim: to develop the students' ability to listen to a 10 min+ lecture, to take notes and then use those notes to answer a range of test type questions.

Lesson Time: Approximately 1:30-2:00 hours

Lesson Plan

1. Lead in

- Ask Students to discuss the 'title' and predict the content of lecture
- Ask students to write down key terms / language from discussion
- Feed in / check key vocabulary

Three types of lesson

Lesson#1: [hard]

1. Students listen once – take notes
2. Give 5 minutes to tidy notes
3. Listen again and add to notes (use a different colour pen).
4. Give out questions – set 20-25 minutes to answer.
5. Feedback answers (give out answers or go through on board)

Lesson #2: [medium]

1. Students listen once – take notes.
2. Give out questions: Set 15 minutes for students to answer questions from notes
3. Listen again – students answer the questions as they listen
4. Give extra 10 minutes to consolidate answers
5. Feedback answers (give out answers or go through on board)

Lesson #3: [easy]

1. Give out questions - students have 10 minutes to look at questions
2. Students listen and answer questions
3. Give 5 minutes to tidy notes
4. Students listen again – check answers and answer questions missed
5. 5-10 minutes to tidy answers
6. Feedback answers (give out answers or go through on board)

What happens inside those massive warehouses?

TED TALK: Mick Mountz [Oct 2011. 12:06]

1. Short answers

What are the three key terms of settings that the lecture will focus on today?

1	<i>Pick</i>
2	
3	

___ / 2

2. True / False / Not given [T / F / NG]

T / F / NG

i. There are hundreds of robots working in packing warehouses	
ii. The classic pick-pack worker spends 60-80% of their day walking	
iii. The classic pick-pack worker walks 5-10 km a day	
iv. The old traditional model was unproductive	
v. The old model was unsatisfying for workers	
vi. The old method caused workers to become tired and ill	

___ / 6

3. Key information

The Example;

Company name	i. <i>Webvan</i>
Service	ii.
Product	iii.
Problem	iv.
Outcome	v.

___ / 4

4. Open answer

What was the speakers vision? [finish off this sentence...]

We I need is a system where I put out my hand and _____ _____
--

___ / 2

5. Key information

Hypothetical China example:

What would be built? (include size)	i.
What type of market?	ii. <i>Low cost</i>
What type of Labour?	iii.
The cost of labour...	iv.
The number of workers...	v.
The main idea is...	vi.

___ / 5

6. Key information

The Beijing Olympics:

Inspired the idea of	i.
Robots	ii. <i>mobile robots that move inventory around</i>
Key terms:	iii.
The power of emergence systems is	iv.

___ / 3

7. Multiple choice

The logistics of the Pick, pack, ship centre.

The pickers life is totally different because... [choose only one]

a	robots bring products to pickers
b	pick workers are in the centre of the warehouse
c	the pickers control the robots
d	All the above

___ / 1

What has changed? [choose only one]

a	Less walking
b	Less searching for products
c	Less waiting around
d	All the above

___ / 1

Productivity is now better because... [choose only one]

a	more accurate
b	robots are self-aware
c	robots don't make mistakes
d	All the above

___ / 1

The approach – cross fertilization of ideas [choose only one]

a	has created a conveyor system
b	has changed the impact of productivity
c	is using 10 workers not nine
d	All the above

___ / 1

8. Summary – [fill in the gaps]

The diagnostics of the warehouse

The warehouse utilizes parallel processing supercomputer architectures to i. **t**_____ the popularity of products and using dynamic and adaptive ii. **a**_____ to efficiently control the warehouse. For example, for valentine's day all products connected to this day are moved to the iii. **F**_____ of the warehouse a iv. **w**_____ before, which improves packing times. Two days after valentine's day the products have drifted to the v. **b**_____ of the warehouse. One effect of this approach is that it can pick and pack any sized item and service 2 pick stations up to vi. _____ [a number] stations.

___ / 6

9. Matching

The process [use arrows to match the endings]

Inventory	i. gets into a queuing system
The software	ii. receive more pods
The pod	iii. scans and puts in bucket
The systems adapts the pods	iv. moves along the highway
The faster pickers	v. understands what's going on at the pick stations
The picker	vi. to the speed of the workers

___ / 5

10. Word completion

What are key changes for pickers? [use only one word]

i.	Never has idle time
ii.	Never has to leave their _____
iii.	More accurate
iv.	More _____
v.	More _____

___ / 3

11. Open answer

Testimonials – write one positive point form workers

___ / 1

12. Conclusion

What question should you ask?

___ / 1

Overall score: ___ / 42

What happens inside those massive warehouses? **ANSWERS**

TED TALK: Mick Mountz [Oct 2011. 12:06]

1. Short answers

What are the three key terms of settings that the lecture will focus on today?

1	Pick
2	Pack
3	Ship

___ / 2

2. True / False / Not given [T / F / NG]

T / F / NG

i. There are hundreds of robots working in packing warehouses [thousands]	F
ii. The classic pick-pack worker spends 60-80% of their day walking [60-70]	F
iii. The classic pick-pack worker walks 5-10 km a day [miles]	F
iv. The old traditional model was unproductive	T
v. The old model was unsatisfying for workers [unfulfilling]	T
vi. The old method caused workers to become tired and ill	NG

___ / 6

3. Key information

The Example;

Company name	i. <i>Webvan</i>
Service	ii. online delivery service
Product	iii. groceries
Problem	iv. not cost effective
Outcome	v. went out of business / bankrupt

___ / 4

4. Open answer

What was the speakers vision? [finish off this sentence...]

We I need is a system where I put out my hand and _____ the product shows up and pack it into the order.

[2 points = 1 for shows up / 1 for pack it]

___ / 2

5. Key information

Hypothetical China example:

What would be built? (include size)	i. Million square foot distribution centre
What type of market?	ii. <i>Low cost</i>
What type of Labour?	iii. Cheap
The cost of labour...	iv. zero \$ an hour
The number of workers...	v. 10,000
The main idea is...	vi. each worker has one item and when called comes to the packer.

___ / 5

6. Key information

The Beijing Olympics:

Inspired the idea of	i. mobile shelving
Robots	ii. <i>mobile robots that move inventory around</i>
Key terms:	iii. Peer-to-peer coordination and communication
The power of emergence systems is	iv. Things talk / speak to each other

___ / 3

7. Multiple choice

The logistics of the pick, pack, ship centre.

The pickers life is totally different because...

a	<u>Robots bring products to pickers</u>
b	Pick workers are in the centre of the warehouse
c	Pickers control the robots
d	All the above

___ / 1

What has changed?

a	Less walking
b	Less searching for products
c	Less waiting around
d	<u>All the above</u>

___ / 1

Productivity is now better because...

a	<u>More accurate</u>
b	Robots are self-aware
c	Robots don't make mistakes
d	All the above

___ / 1

The approach – cross fertilization of ideas

a	Has created a conveyor system
b	<u>Has changed the impact of productivity</u>
c	Is using 10 workers not nine
d	All the above

___ / 1

8. Summary – [fill in the gaps]

The diagnostics of the warehouse

The warehouse utilizes parallel processing supercomputer architectures to i. **track** the popularity of products and using dynamic and adaptive ii. **algorithms** to efficiently control the warehouse. For example, for valentine's day all products connected to this day are moved to the iii. **front** of the warehouse a iv. **week** before, which improves packing times. Two days after valentine's day the products have drifted to the v. **back** of the warehouse. One effect of this approach is that it can pick and pack any sized item and service 2 pick stations up to vi. **200** stations.

___ / 6

9. Matching

The process

Inventory	i. gets into a queuing system
The software	ii. receive more pods
The pod	iii. scans and puts in bucket
The systems adapts the pods	iv. moves along the highway
The faster pickers	v. understands what's going on at the pick stations
The picker	vi. to the speed of the workers

___ / 5

10. Sentence completion

What are key changes for pickers

i.	Never has idle time
ii.	Never has to leave mat
iii.	More accurate
iv.	More productive
v.	More fulfilling

___ / 4

11. Open answer

Testimonials – write one positive point form workers

Workers now compete to work in the Kiva zone / Workers have more energy / more time for family / Kiva zone is stress free [any of these]

___ / 1

12. Conclusion

What question should you ask?

Did a robot assist in the picking and packing of that order?

___ / 1

Overall score: ___ /