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Ready-to-Use English Lessons by Sean Banville

Level 3 – 12th September, 2018

U.S. to spend $2 billion on artificial intelligence weapons

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https://breakingnewsenglish.com/1809/180912-weapons.html

Contents

Please try Levels 0, 1 and 2 (they are easier).

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THE ARTICLE

The United States Defense Department is going to spend up to $2 billion on artificial intelligence (AI) weapons over the next five years. This will be the most the department has ever spent on AI systems for weapons. The department wants to have the most advanced weapons in the world. It wants its weapons to be better than those of China and Russia. Defense bosses want future weapons to be trusted and accepted by military generals and commanders. They want to make sure weapons in the future do not make mistakes. Department official John Everett said: "We think it's a good time to seed the field of AI. We think we can accelerate two decades of progress into five years."

Some of the new AI weapons may be able to make and act on their own decisions. This means computer systems and algorithms could make a decision (without any human decision-making) to attack a target that could kill people. Many people think this is dangerous and could lead to innocent lives being lost. The Defense Department said AI technology could, "make it possible to develop and [use] autonomous systems that could independently select and attack targets with [deadly] force". It added that weapons using AI systems can currently choose targets on their own, but military commanders do not want to let the weapons decide on the targets to attack. The commanders want to make the final decision.

WARM-UPS

1. WEAPONS: Students walk around the class and talk to other students about weapons. Change partners often and share your findings.

2. CHAT: In pairs / groups, talk about these topics or words from the article. What will the article say about them? What can you say about these words and your life?

defense / artificial intelligence / weapons / advanced / military / generals / decades / decisions / computer systems / algorithms / dangerous / force / targets / commanders

Have a chat about the topics you liked. Change topics and partners frequently.

3. ARTIFICIAL INTELLIGENCE: Students A **strongly** believe artificial intelligence is dangerous; Students B **strongly** believe it isn't. Change partners again and talk about your conversations.

4. AI: How can AI help us in our lives? Could there be any dangers? Complete this table with your partner(s). Change partners often and share what you wrote.

	Help	**Dangers**
Weapons		
Education		
Health		
Crime		
In out homes		
Transport		

5. DEPARTMENT: Spend one minute writing down all of the different words you associate with the word "department". Share your words with your partner(s) and talk about them. Together, put the words into different categories.

6. $2 BILLION: Rank these with your partner. Put the best things to spend $2 billion on at the top. Change partners often and share your rankings.

- weapons
- schools
- hospitals
- police

- sport
- agriculture
- homelessness
- small businesses

VOCABULARY MATCHING

Paragraph 1

1.	artificial	a.	People in charge (the leaders) of a worker, company or organization.
2.	systems	b.	Made or produced by human beings rather than occurring naturally.
3.	bosses	c.	Has the quality of being believed in by people.
4.	trusted	d.	Agreed to a person, plan or offer.
5.	accepted	e.	Sets of things working together as parts of a machine or an interconnecting network.
6.	decades	f.	Advances or development toward a better, more complete, or more modern condition.
7.	progress	g.	A period of ten years.

Paragraph 2

8.	algorithms	h.	A person, object, or place selected as the aim of an attack.
9.	target	i.	Acting independently or having the freedom to do so.
10.	innocent	j.	A process or set of rules to be followed in calculations or other problem-solving operations, especially by a computer.
11.	develop	k.	Not responsible for or directly involved in an event, but suffering its effects.
12.	autonomous	l.	Making people do things they don't want to, especially with the use or threat of violence.
13.	force	m.	Grow or cause to grow and become more mature and advanced.
14.	military	n.	About the soldiers, armies, navies, etc. of a country.

BEFORE READING / LISTENING

1. TRUE / FALSE: Read the headline. Guess if a-h below are true (T) or false (F).

a. The USA will spend over $2 billion on artificial intelligence for weapons.   **T / F**

b. The USA has a five-year spending plan for the weapons.   **T / F**

c. The article says the USA wants better weapons than Russia and China.   **T / F**

d. The USA will try to do 20 years of work in just five years.   **T / F**

e. The new weapons will not be able to make decisions without humans.   **T / F**

f. Nobody thinks the artificial intelligence weapons will be dangerous.   **T / F**

g. A.I. weapons will never be able to select targets on their own.   **T / F**

h. Military commanders want to make final decisions about targets.   **T / F**

2. SYNONYM MATCH: (The words in **bold** are from the news article.)

1.	**up to**	a.	modern
2.	**next**	b.	lethal
3.	**advanced**	c.	speed up
4.	**accepted**	d.	cause
5.	**accelerate**	e.	upcoming
6.	**decisions**	f.	choose
7.	**lead to**	g.	last
8.	**select**	h.	as much as
9.	**deadly**	i.	judgments
10.	**final**	j.	welcomed

3. PHRASE MATCH: (Sometimes more than one choice is possible.)

1.	the most the department has	a.	not make mistakes
2.	the most advanced	b.	the final decision
3.	trusted and accepted	c.	ever spent
4.	make sure weapons in the future do	d.	algorithms
5.	we can accelerate two decades of	e.	by military generals
6.	act on their own	f.	deadly force
7.	computer systems and	g.	weapons in the world
8.	lead to innocent lives	h.	progress into five years
9.	select and attack targets with	i.	decisions
10.	The commanders want to make	j.	being lost

GAP FILL

The United States Defense Department is going to (1) _____ up to $2 billion on artificial intelligence (AI) weapons over the (2) _____ five years. This will be the most the department has ever spent on AI systems for weapons. The department wants to have the (3) _____ advanced weapons in the world. It wants its weapons to be better than (4) _____ of China and Russia. Defense bosses want future weapons to be trusted and (5) _____ by military generals and commanders. They want to make sure weapons in the future do not make (6) _____. Department official John Everett said: "We think it's a good time to (7) _____ the field of AI. We think we can accelerate two decades of (8) _____ into five years."

those

next

seed

most

progress

accepted

spend

mistakes

Some of the new AI weapons may be (9) _____ to make and act on their own decisions. This (10) _____ computer systems and algorithms could make a decision (without any human decision-making) to attack a (11) _____ that could kill people. Many people think this is dangerous and could lead to (12) _____ lives being lost. The Defense Department said AI technology could, "make it (13) _____ to develop and [use] autonomous systems that could independently select and attack targets with [deadly] (14) _____ ". It added that weapons using AI systems can currently choose targets on their own, but (15) _____ commanders do not want to let the weapons decide on the targets to attack. The commanders want to make the (16) _____ decision.

possible

means

final

innocent

military

able

target

force

LISTENING – Guess the answers. Listen to check.

1) spend up to $2 billion on artificial intelligence (AI) weapons _____ five years
   a. overly the next
   b. over a next
   c. over the next
   d. over that next

2) The department wants to have the most advanced weapons _____
   a. on the world
   b. an the world
   c. to the world
   d. in the world

3) bosses want future weapons to be trusted and accepted _____
   a. by military generals
   b. bye militarily generals
   c. by military generalise
   d. bye military general

4) They want to make sure weapons in the future _____ mistakes
   a. do not take
   b. do not make
   c. do not fake
   d. do not sake

5) We think we can accelerate two decades of progress _____
   a. onto five years
   b. unto five years
   c. as to five years
   d. into five years

6) Some of the new AI weapons may be able to make and act _____ decisions
   a. in their own
   b. on they're roam
   c. on their own
   d. in their roam

7) This means computer systems and algorithms _____ decision
   a. could make all
   b. could make a
   c. could make an
   d. could make at

8) Many people think this is dangerous and could lead to innocent _____
   a. live been lost
   b. lives be in lost
   c. live being lost
   d. lives being lost

9) systems that could independently select and attack targets _____
   a. with deadly force
   b. with deadly farce
   c. with deadly fierce
   d. with deadly fours

10) The commanders want to make _____
   a. the final revision
   b. the final derision
   c. the final incision
   d. the final decision

LISTENING – Listen and fill in the gaps

The United States Defense Department is going to spend up to $2 billion on artificial intelligence (AI) weapons (1) _____ five years. This will be the most the department (2) _____ on AI systems for weapons. The department wants to have the most advanced weapons in the world. It wants its weapons to be (3) _____ of China and Russia. Defense bosses want future weapons to be trusted and accepted (4) _____ and commanders. They want to make sure weapons in the future do (5) _____. Department official John Everett said: "We think it's a good time to seed the field of AI. We think we can accelerate (6) _____ progress into five years."

Some of the new AI weapons (7) _____ to make and act on their own decisions. This means computer systems and algorithms could (8) _____ (without any human decision-making) to attack a target that could kill people. Many people think this is dangerous and could lead to innocent (9) _____. The Defense Department said AI technology could, "make it possible to develop and [use] autonomous systems that could independently (10) _____ targets with [deadly] force". It added that weapons using AI systems can currently (11) _____ their own, but military commanders do not want to let the weapons decide on the targets to attack. The commanders want to (12) _____ decision.

COMPREHENSION QUESTIONS

1. How long will it take the USA to spend the $2 billion?

2. What countries does the USA want to have better weapons than?

3. Who does the USA want to trust and accept its new weapons?

4. What do officials not want the new weapons to do?

5. How many years of work do officials want to put into five years?

6. What allows the weapons to make decisions besides computer systems?

7. What do many people think could be lost because of the new weapons?

8. What kind of force could the new weapons attack targets with?

9. What can AI systems currently choose on their own?

10. What do commanders want to make regarding attacking targets?

MULTIPLE CHOICE - QUIZ

1) How long will it take the USA to spend the $2 billion?
a) two decades
b) no time at all
c) five years
d) a year

2) What countries does the USA want to have better weapons than?
a) China and Russia
b) Russia and North Korea
c) North Korea and China
d) Mexico and Canada

3) Who does the USA want to trust and accept its new weapons?
a) the people
b) military generals
c) its enemies
d) its soldiers

4) What do officials not want the new weapons to do?
a) cost too much
b) go into space
c) explode
d) make mistakes

5) How many years of work do officials want to put into five years?
a) 25
b) 15
c) 20
d) 10

6) What allows the weapons to make decisions besides computer systems?
a) silicon
b) algorithms
c) chips
d) professors

7) What do many people think could be lost because of the new weapons?
a) jobs
b) money
c) borders
d) innocent lives

8) What kind of force could the new weapons attack targets with?
a) a massive force
b) deadly force
c) brute force
d) a space force

9) What can AI systems currently choose on their own?
a) zeroes and ones
b) targets
c) numbers
d) colours

10) What do commanders want to make regarding attacking targets?
a) the final decision
b) maps
c) proof
d) money

ROLE PLAY

Role A – Weapons

You think weapons are the best thing to spend $2 billion on. Tell the others three reasons why. Tell them what is wrong with spending on their things. Also, tell the others which is the last of these to get money (and why): schools, hospitals or small businesses.

Role B – Schools

You think schools are the best thing to spend $2 billion on. Tell the others three reasons why. Tell them what is wrong with spending on their things. Also, tell the others which is the last of these to get money (and why): weapons, hospitals or small businesses.

Role C – Hospitals

You think hospitals are the best thing to spend $2 billion on. Tell the others three reasons why. Tell them what is wrong with spending on their things. Also, tell the others which is the last of these to get money (and why): schools, weapons or small businesses.

Role D – Small Businesses

You think small businesses are the best thing to spend $2 billion on. Tell the others three reasons why. Tell them what is wrong with spending on their things. Also, tell the others which is the last of these to get money (and why): schools, hospitals or weapons.

AFTER READING / LISTENING

1. WORD SEARCH: Look in your dictionary / computer to find collocates, other meanings, information, synonyms … for the words 'artificial' and 'intelligence'.

artificial	intelligence

- Share your findings with your partners.
- Make questions using the words you found.
- Ask your partner / group your questions.

2. ARTICLE QUESTIONS: Look back at the article and write down some questions you would like to ask the class about the text.

- Share your questions with other classmates / groups.
- Ask your partner / group your questions.

3. GAP FILL: In pairs / groups, compare your answers to this exercise. Check your answers. Talk about the words from the activity. Were they new, interesting, worth learning…?

4. VOCABULARY: Circle any words you do not understand. In groups, pool unknown words and use dictionaries to find their meanings.

5. TEST EACH OTHER: Look at the words below. With your partner, try to recall how they were used in the text:

• spend	• own
• most	• making
• better	• lost
• trusted	• deadly
• sure	• currently
• two	• final

WEAPONS SURVEY

Write five GOOD questions about weapons in the table. Do this in pairs. Each student must write the questions on his / her own paper.
When you have finished, interview other students. Write down their answers.

	STUDENT 1 _____	STUDENT 2 _____	STUDENT 3 _____
Q.1.			
Q.2.			
Q.3.			
Q.4.			
Q.5.			

- Now return to your original partner and share and talk about what you found out. Change partners often.
- Make mini-presentations to other groups on your findings.

WEAPONS DISCUSSION

STUDENT A's QUESTIONS (Do not show these to student B)

1. What did you think when you read the headline?

2. What images are in your mind when you hear the word 'weapon'?

3. Is $2 billion a lot to spend on a defense system?

4. How could the $2 billion be used is better ways?

5. What do you think of weapons?

6. What do you think of artificial intelligence?

7. What do you think of weapons with artificial intelligence?

8. What do you think of weapons that decide to bomb people?

9. What will future weapons be like?

10. What would the world be like with no weapons?

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WEAPONS DISCUSSION

STUDENT B's QUESTIONS (Do not show these to student A)

11. Did you like reading this article? Why/not?

12. What do you think of when you hear the word 'intelligence'?

13. What do you think about what you read?

14. What are the weapons like in your country's army?

15. Why do countries think they need weapons?

16. Should humans always make the decision about what to target?

17. What would happen if we could not control AI weapons?

18. How does AI help your life?

19. Could artificial intelligence weapons destroy the Earth?

20. What questions would you like to ask the U.S. Defense Department?

DISCUSSION (Write your own questions)

<u>STUDENT A's QUESTIONS (Do not show these to student B)</u>

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

DISCUSSION (Write your own questions)

<u>STUDENT B's QUESTIONS (Do not show these to student A)</u>

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

LANGUAGE - CLOZE

The United States Defense Department is going to spend (1) _____ to $2 billion on artificial intelligence (AI) weapons over the next five years. This will be the most the department has (2) _____ spent on AI systems for weapons. The department wants to have the most advanced weapons (3) _____ the world. It wants its weapons to be better than those of China and Russia. Defense bosses want future weapons to (4) _____ trusted and accepted by military generals and commanders. They want to make sure weapons in the future do not (5) _____ mistakes. Department official John Everett said: "We think it's a good time to seed the field of AI. We think we can accelerate two decades of progress (6) _____ five years."

Some of the new AI weapons may be able to make and (7) _____ on their own decisions. This means computer systems and algorithms could make a decision (without (8) _____ human decision-making) to attack a target that could kill people. Many people think this is dangerous and could lead to innocent lives (9) _____ lost. The Defense Department said AI technology could, "make it possible to develop and [use] autonomous systems that could (10) _____ select and attack targets with [deadly] force". It added that weapons using AI systems can (11) _____ choose targets on their own, but military commanders do not want to (12) _____ the weapons decide on the targets to attack. The commanders want to make the final decision.

Put the correct words from the table below in the above article.

1.	(a)	up	(b)	along	(c)	down	(d)	of
2.	(a)	never	(b)	even	(c)	ever	(d)	every
3.	(a)	to	(b)	of	(c)	in	(d)	on
4.	(a)	bean	(b)	being	(c)	been	(d)	be
5.	(a)	make	(b)	get	(c)	do	(d)	take
6.	(a)	unto	(b)	into	(c)	as to	(d)	onto
7.	(a)	tact	(b)	fact	(c)	pact	(d)	act
8.	(a)	many	(b)	any	(c)	all	(d)	few
9.	(a)	be	(b)	been	(c)	being	(d)	bean
10.	(a)	independence	(b)	independently	(c)	independent	(d)	independents
11.	(a)	currant	(b)	currency	(c)	current	(d)	currently
12.	(a)	lot	(b)	let	(c)	late	(d)	latter

SPELLING

Paragraph 1

   1. the most the <u>darettmnpe</u> has ever spent

   2. the most <u>eavadcdn</u> weapons

   3. <u>taepdcce</u> by military generals

   4. do not make <u>aketimss</u>

   5. We think we can <u>cteeaaeclr</u>

   6. two <u>cdeedsa</u> of progress

Paragraph 2

   7. act on their own <u>ssociiden</u>

   8. computer <u>semtsys</u>

   9. lead to <u>nicnneot</u> lives being lost

  10. make it <u>ispesblo</u>

  11. attack targets with deadly <u>cfero</u>

  12. can <u>lcrternuy</u> choose

PUT THE TEXT BACK TOGETHER

Number these lines in the correct order.

(*1*)   The United States Defense Department is going to spend up to $2 billion on artificial intelligence (AI) weapons

(   )   systems and algorithms could make a decision (without any human decision-making) to attack

(   )   force". It added that weapons using AI systems can currently choose targets on their own, but military commanders

(   )   be trusted and accepted by military generals and commanders. They want to make

(   )   lost. The Defense Department said AI technology could, "make it possible to develop and [use] autonomous

(   )   over the next five years. This will be the most the department has ever spent

(   )   on AI systems for weapons. The department wants to have the most advanced weapons in the

(   )   world. It wants its weapons to be better than those of China and Russia. Defense bosses want future weapons to

(   )   systems that could independently select and attack targets with [deadly]

(   )   do not want to let the weapons decide on the targets to attack. The commanders want to make the final decision.

(   )   time to seed the field of AI. We think we can accelerate two decades of progress into five years."

(   )   Some of the new AI weapons may be able to make and act on their own decisions. This means computer

(   )   a target that could kill people. Many people think this is dangerous and could lead to innocent lives being

(   )   sure weapons in the future do not make mistakes. Department official John Everett said: "We think it's a good

PUT THE WORDS IN THE RIGHT ORDER

1. department   most   ever   the   The   spent   .   has

2. advanced   in   most   the   Have   the   weapons   world   .

3. wants   its   to   be   better   .   weapons   It

4. bosses   Defense   want   be   future   to   weapons   trusted   .

5. a   to   good   think   We   seed   .   time   it's

6. human   without   decision-making   .   Make   a   any   decision

7. lost   .   innocent   This   to   could   lives   being   lead

8. using   systems   choose   AI   can   currently   Weapons   targets   .

9. weapons   targets   decide   the   on   attack   .   The   to

10. want   decision   .   The   commanders   the   make   to   final

CIRCLE THE CORRECT WORD (20 PAIRS)

The United States Defense Department is *going / gone* to spend up to $2 billion on artificial intelligence (AI) weapons *over / under* the next five years. This will be the most the department has *never / ever* spent on AI systems for weapons. The department wants to have the *most / must* advanced weapons in the world. It wants its weapons to be *more / better* than those of China and Russia. Defense bosses want future *weapon / weapons* to be trusted and accepted *by / at* military generals and commanders. They want to make *ensure / sure* weapons in the future do not *fake / make* mistakes. Department official John Everett said: "We think it's a good time to seed the field of AI. We think we can accelerate two *decades / decadence* of progress into five years."

Some of the new AI weapons may be *ability / able* to make and act on their own decisions. This *means / mean* computer systems and algorithms could make a decision (without any *humane / human* decision-making) to attack a target that could *killer / kill* people. Many people think this is dangerous and could lead to *innocent / innocence* lives being lost. The Defense Department said AI technology could, "make it *possibly / possible* to develop and [use] autonomous systems that could independently select and attack targets with [deadly] *farce / force*". It added that weapons using AI systems can currently choose *targets / target* on their own, but military commanders do not want to let the weapons decide *on / in* the targets to attack. The commanders want to make the *finally / final* decision.

Talk about the connection between each pair of words in italics, and why the correct word is correct.

INSERT THE VOWELS (a, e, i, o, u)

T h_ U n_t_d S t_t_s D_f_ns_ D_p_r t m_n t _s g__ n g t_ s p_n d _p t_ $ 2 b_l l__ n _n _r t_f_c__ l _n t_l l_g_n c_ (A I) w__ p_n s _v_r t h_ n_x t f_v_ y__ r s . T h_s w_l l b_ t h_ m_s t t h_ d_p_r t m_n t h_s _v_r s p_n t _n A I s y s t_m s f_r w__ p_n s . T h_ d_p_r t m_n t w_n t s t_ h_v_ t h_ m_s t _d v_n c_d w__ p_n s _n t h_ w_r l d . I t w_n t s _t s w__ p_n s t_ b_ b_t t_r t h_n t h_s_ _f C h_n_ _n d R_s s__ . D_f_n s_ b_s s_s w_n t f_t_r_ w__ p_n s t_ b_ t r_s t_d _n d _c c_p t_d b y m_l_t_r y g_n_r_l s _n d c_m m_n d_r s . T h_y w_n t t_ m_k_ s_r_ w__ p_n s _n t h_ f_t_r_ d_ n_t m_k_ m_s t_k_s . D_p_r t m_n t _f f_c__ l J_h n E v_r_t t s__ d : " W_ t h_n k _t ' s _ g__ d t_m_ t_ s__ d t h_ f__ l d _f A I . W_ t h_n k w_ c_n _c c_l_r_t_ t w_ d_c_d_s _f p r_g r_s s _n t_ f_v_ y__ r s . "

S_m_ _f t h_ n_w A I w__ p_n s m_y b_ _b l_ t_ m_k_ _n d _c t _n t h__ r _w n d_c_s__ n s . T h_s m__ n s c_m p_t_r s y s t_m s _n d _l g_r_t h m s c__ l d m_k_ _ d_c_s__ n (w_t h__ t _n y h_m_n d_c_s__ n - m_k_n g) t_ _t t_c k _ t_r g_t t h_t c__ l d k_l l p__ p l_ . M_n y p__ p l_ t h_n k t h_s _s d_n g_r__ s _n d c__ l d l__ d t_ _n n_c_n t l_v_s b__ n g l_s t . T h_ D_f_n s_ D_p_r t m_n t s__ d A I t_c h n_l_g y c__ l d , " m_k_ _t p_s s_b l_ t_ d_v_l_p _n d [_s _] __ t_n_m__ s s y s t_m s t h_t c__ l d _n d_p_n d_n t l y s_l_c t _n d _t t_c k t_r g_t s w_t h [d__ d l y] f_r c_ " . I t _d d_d t h_t w__ p_n s _s_n g A I s y s t_m s c_n c_r r_n t l y c h__ s_ t_r g_t s _n t h__ r _w n , b_t m_l_t_r y c_m m_n d_r s d_ n_t w_n t t_ l_t t h_ w__ p_n s d_c_d_ _n t h_ t_r g_t s t_ _t t_c k . T h_ c_m m_n d_r s w_n t t_ m_k_ t h_ f_n_l d_c_s__ n .

PUNCTUATE THE TEXT AND ADD CAPITALS

the united states defense department is going to spend up to 2 billion on artificial intelligence ai weapons over the next five years this will be the most the department has ever spent on ai systems for weapons the department wants to have the most advanced weapons in the world it wants its weapons to be better than those of china and russia defense bosses want future weapons to be trusted and accepted by military generals and commanders they want to make sure weapons in the future do not make mistakes department official john everett said we think its a good time to seed the field of ai we think we can accelerate two decades of progress into five years

some of the new ai weapons may be able to make and act on their own decisions this means computer systems and algorithms could make a decision without any human decisionmaking to attack a target that could kill people many people think this is dangerous and could lead to innocent lives being lost the defense department said ai technology could make it possible to develop and use autonomous systems that could independently select and attack targets with deadly force it added that weapons using ai systems can currently choose targets on their own but military commanders do not want to let the weapons decide on the targets to attack the commanders want to make the final decision

PUT A SLASH (/) WHERE THE SPACES ARE

TheUnitedStatesDefenseDepartmentisgoingtospendupto$2billiono nartificialintelligence(AI)weaponsoverthenextfiveyears.Thiswillbet hemostthedepartmenthaseverspentonAIsystemsforweapons.Thed epartmentwantstohavethemostadvancedweaponsintheworld.Itwa ntsitsweaponstobebetterthanthoseofChinaandRussia.Defenseboss eswantfutureweaponstobetrustedandacceptedbymilitarygeneralsa ndcommanders.Theywanttomakesureweaponsinthefuturedonotma kemistakes.DepartmentofficialJohnEverettsaid:"Wethinkit'sagoodt imetoseedthefieldofAI.Wethinkwecanacceleratetwodecadesofprogr essintofiveyears."SomeofthenewAIweaponsmaybeabletomakeand actontheirowndecisions.Thismeanscomputersystemsandalgorithm scouldmakeadecision(withoutanyhumandecision-making)toattac katargetthatcouldkillpeople.Manypeoplethinkthisisdangerousandco uldleadtoinnocentlivesbeinglost.TheDefenseDepartmentsaidAItech nologycould,"makeitpossibletodevelopand[use]autonomoussyste msthatcouldindependentlyselectandattacktargetswith[deadly]forc e".ItaddedthatweaponsusingAIsystemscancurrentlychoosetargets ontheirown,butmilitarycommandersdonotwanttolettheweaponsdec ideonthetargetstoattack.Thecommanderswanttomakethefinaldecis ion.

FREE WRITING

Write about **weapons** for 10 minutes. Comment on your partner's paper.

ACADEMIC WRITING

All countries should destroy their weapons. Discuss.

HOMEWORK

1. VOCABULARY EXTENSION: Choose several of the words from the text. Use a dictionary or Google's search field (or another search engine) to build up more associations / collocations of each word.

2. INTERNET: Search the Internet and find out more about this news story. Share what you discover with your partner(s) in the next lesson.

3. WEAPONS: Make a poster about weapons. Show your work to your classmates in the next lesson. Did you all have similar things?

4. ARTIFICIAL INTELLIGENCE: Write a magazine article about artificial intelligence. Include imaginary interviews with people who are for and against it.

Read what you wrote to your classmates in the next lesson. Write down any new words and expressions you hear from your partner(s).

5. WHAT HAPPENED NEXT? Write a newspaper article about the next stage in this news story. Read what you wrote to your classmates in the next lesson. Give each other feedback on your articles.

6. LETTER: Write a letter to an expert on weapons. Ask him/her three questions about them. Give him/her three of your opinions on weapons. Read your letter to your partner(s) in your next lesson. Your partner(s) will answer your questions.

ANSWERS

VOCABULARY (p.4)

1.	b	2.	e	3.	a	4.	c	5.	d	6.	g	7.	f
8.	j	9.	h	10.	k	11.	m	12.	i	13.	l	14.	n

TRUE / FALSE (p.5)

a	F	b	T	c	T	d	T	e	F	f	F	g	F	h	T

SYNONYM MATCH (p.5)

1.	up to	a.	as much as
2.	next	b.	upcoming
3.	advanced	c.	modern
4.	accepted	d.	welcomed
5.	accelerate	e.	speed up
6.	decisions	f.	judgments
7.	lead to	g.	cause
8.	select	h.	choose
9.	deadly	i.	lethal
10.	final	j.	last

COMPREHENSION QUESTIONS (p.9)

1. Five years
2. China and Russia
3. Military generals and commanders
4. Make mistakes
5. Two decades (twenty years)
6. Algorithms
7. Innocent lives
8. Deadly force
9. Targets
10. The final decision

WORDS IN THE RIGHT ORDER (p.20)

1. The most the department has ever spent.
2. Have the most advanced weapons in the world.
3. It wants its weapons to be better.
4. Defense bosses want future weapons to be trusted.
5. We think it's a good time to seed.
6. Make a decision without any human decision-making.
7. This could lead to innocent lives being lost.
8. Weapons using AI systems can currently choose targets.
9. The weapons decide on the targets to attack.
10. The commanders want to make the final decision.

MULTIPLE CHOICE - QUIZ (p.10)

1. c	2. a	3. b	4. d	5. c	6. b	7. d	8. b	9. b	10. a

ALL OTHER EXERCISES

Please check for yourself by looking at the Article on page 2.
(It's good for your English ;-)