Human Guinea Pigs

Every drug prescribed by a doctor requires a long journey from the laboratory to your medicine cabinet. All in all, it takes about twelve years, and there exists but a marginal chance that the experimental drug will be approved, approximately a 1 in 5000 chance. As may be expected, there are many stages during this lengthy process, one of which is the initial clinical trials.

Enter the professional guinea pigs, or people who sell their bodies for drug research. During these clinical trials, a small number of perfectly healthy people take the newly developed drug for the first time, and this allows the pharmaceutical companies to identify safe dosages and any possible side effects. The pay is substantial, as volunteers can earn several thousand dollars in just a few weeks. And of course, with an increased number of procedures and risk, the potential to earn more money also increases.

Some people become human guinea pigs because they cannot find alternative work, as perhaps they have a history of incarceration. A few test subjects just cannot find gainful employment because of a somewhat sluggish economy. And others are lured by easy money without much of a time commitment, and thus they can pursue other interests.

Whatever the reason for testing drugs, the possibility of severe complications or even death should not be discounted. There exists an inherent risk because no one exactly knows how the human body will react to the new drug, even if the risk is minimized as much as possible. In 2016, for example, five volunteers were hospitalized and one volunteer died during clinical trials in France.

Teacher's Notes:

* Underlined words in red typeface are the recommended vocabulary for this lesson.
WARM-UPS

Select one or all of the following warm-up activities.

1: **Define:** What does "human guinea pig" mean? Can you use it in a sentence? Can you give examples?

2: **Brainstorm:** Brainstorm with a partner(s) words and ideas associated with "danger" for 2 minutes. Spend another 5 minutes or less discussing the words and ideas together.

3: **Title:** Speculate and/or discuss the contents of today's article from its title: "Human Guinea Pigs."

4: **Speculate:** Write in the missing word for today's article title: "Human (__) Pig." Why did you choose this word for the blank?

5: **Do you agree or disagree? Why?**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>I consider myself as someone who takes risks.</td>
</tr>
<tr>
<td>b.</td>
<td>I would take a big risk if the money were right.</td>
</tr>
<tr>
<td>c.</td>
<td>People often do dangers or stupid things for money.</td>
</tr>
<tr>
<td>d.</td>
<td>New drugs and medicines are always perfectly safe.</td>
</tr>
<tr>
<td>e.</td>
<td>I have almost died.</td>
</tr>
</tbody>
</table>
VOCABULARY

Select one of the following vocabulary acquisition activities.

1: Vocabulary match: Individually or in pairs/groups, match the words in column A (from the article) with the best choice in column B.

| a. prescribe | q. operation or test |
| b. marginal | r. profitable |
| c. substantial | s. negligible |
| d. procedure | t. other |
| e. alternative | u. attract |
| f. incarceration | v. fundamental |
| g. gainful | w. select for use |
| h. lure | x. ignore |
| i. discount | y. imprisonment |
| j. inherent | z. sizable |

2: Fill in the Blanks: Fill in the blank with the correct word.

| marginal | discounted | alternative | substantial | gainful |
| incarceration | prescribed | lured | inherent | procedures |
| a. Every drug ( ) by a doctor requires a long journey from the laboratory. |
| b. There exists but a ( ) chance that the experimental drug will be approved. |
| c. The pay is ( ), as volunteers can earn several thousand dollars in just a few weeks. |
| d. With an increased number of ( ), the potential to earn more money also increases. |
| e. Some people become human guinea pigs because they cannot find ( ) work. |
| f. Perhaps they have a history of ( ). |
| g. A few test subjects just cannot find ( ) employment. |
| h. Others are ( ) by easy money without much of a time commitment. |
| i. The possibility of severe complications or even death should not be ( ). |
| j. There exists an ( ) risk because no one knows how the body will react to the new drug. |

3: Define: Define each word, correctly pronounce it, explain the meaning and/or usage, and offer an example sentence to the class.

| a. prescribe | c. substantial | e. alternative | g. gainful | i. discount |
| b. marginal | d. procedure | f. incarceration | h. lure | j. inherent |
WORD RECOGNITION

1: Word Search: Find the target words (in bold). Time yourself, and see how many words you can find in three minutes, five minutes, or ten minutes.

<table>
<thead>
<tr>
<th>marginal</th>
<th>discounted</th>
<th>alternative</th>
<th>substantial</th>
<th>gainful</th>
</tr>
</thead>
<tbody>
<tr>
<td>incarceration</td>
<td>prescribed</td>
<td>lured</td>
<td>inherent</td>
<td>procedures</td>
</tr>
</tbody>
</table>

I N C A R S E R A T I O N N S
N A T D O M T D I G S M O D U
H F L N E A A N E U P I A E B
E T O T M T H R B R T R C B S
R X S H E E N S G A U D O I T
E W X Q R T O R I E L W R A
N E T A I A N E U B N P B C N
T D N C N R C A I C U A H S T
Y T P T A R Y R T D S R L E I
U X A X A V C L U I V I J R A
C I D C B S E F L M V C D P L
L H N Z O Z P B H K O E U J H
O I X R D E T N U O C S I D X
G E P S P R O C E D U R E S T
L U F N I A G I Q O Q Q U C K

2: Target Word Pool: Find the target words (in bold) with their exact match. Time yourself, and see how many words you can find in three minutes, five minutes, or ten minutes.

<table>
<thead>
<tr>
<th>marginal</th>
<th>discounted</th>
<th>alternative</th>
<th>substantial</th>
<th>gainful</th>
</tr>
</thead>
<tbody>
<tr>
<td>incarceration</td>
<td>prescribed</td>
<td>lured</td>
<td>inherent</td>
<td>procedures</td>
</tr>
</tbody>
</table>

unsubstantial
allure
incarcerate
margins
incarcerating
inherently
marginalize
discounts
procedure
unsubstantiated

inherent
prescription
inert
discount
procedure
incarcerated
gained
gains
alternatively
lures
incarceration
luring
procedurally
inherited
lurid
margin
al	

prescription
inert
discount
procedure
incarcerated
gained
gains
alternatively
lures
incarceration
luring
procedurally
inherited
lurid
margin
al	

prescription
inert
discount
procedure
incarcerated
gained
gains
alternatively
lures
incarceration
luring
procedurally
inherited
lurid
margin
al	

prescription
inert
discount
procedure
incarcerated
gained
gains
alternatively
lures
incarceration
luring
procedurally
inherited
lurid
margin
al	

prescription
inert
discount
procedure
incarcerated
gained
gains
alternatively
lures
incarceration
luring
procedurally
inherited
lurid
margin
al	

prescription
inert
discount
procedure
incarcerated
gained
gains
alternatively
lures
incarceration
luring
procedurally
inherited
lurid
margin
al	

prescription
inert
discount
procedure
incarcerated
gained
gains
alternatively
lures
incarceration
luring
procedurally
inherited
lurid
margin
al	

prescription
inert
discount
procedure
incarcerated
gained
gains
alternatively
lures
incarceration
luring
procedurally
inherited
lurid
margin
al	

prescription
inert
discount
procedure
incarcerated
gained
gains
alternatively
lures
incarceration
luring
procedurally
inherited
lurid
margin
al	

prescription
inert
discount
procedure
incarcerated
gained
gains
alternatively
lures
incarceration
luring
procedurally
inherited
lurid
margin
al	

prescription
inert
discount
procedure
incarcerated
gained
gains
alternatively
lures
incarceration
luring
procedurally
inherited
lurid
margin
al	

prescription
inert
discount
procedure
incarcerated
gained
gains
alternatively
lures
incarceration
luring
procedurally
inherited
lurid
margin
al	

prescription
inert
discount
procedure
incarcerated
gained
gains
alternatively
lures
incarceration
luring
procedurally
inherited
lurid
margin
al	

prescription
inert
discount
procedure
incarcerated
gained
gains
alternatively
lures
incarceration
luring
procedurally
inherited
lurid
margin
al	

prescription
inert
discount
procedure
incarcerated
gained
gains
alternatively
lures
incarceration
luring
procedurally
inherited
lurid
margin
al	

prescription
inert
discount
procedure
incarcerated
gained
gains
alternatively
lures
incarceration
luring
procedurally
inherited
lurid
margin
al	

prescription
inert
discount
procedure
incarcerated
gained
gains
alternatively
lures
incarceration
luring
procedurally
inherited
lurid
margin
al	

prescription
inert
discount
procedure
incarcerated
gained
gains
alternatively
lures
incarceration
luring
procedurally
inherited
lurid
margin
al	

prescription
inert
discount
procedure
incarcerated
gained
gains
alternatively
lures
incarceration
luring
procedurally
inherited
lurid
margin
al	

prescription
inert
discount
procedure
incarcerated
gained
gains
alternatively
lures
incarceration
luring
procedurally
inherited
lurid
margin
al	

prescription
inert
discount
procedure
incarcerated
gained
gains
alternatively
lures
incarceration
luring
procedurally
inherited
lurid
margin
al	

prescription
inert
discount
procedure
incarcerated
gained
gains
alternatively
lures
incarceration
luring
procedurally
inherited
lurid
margin
al	

prescription
inert
discount
procedure
incarcerated
gained
gains
alternatively
lures
incarceration
luring
procedurally
inherited
lurid
margin
al	

prescription
inert
discount
procedure
incarcerated
gained
gains
alternatively
lures
incarceration
luring
procedurally
inherited
lurid
margin
al	

prescription
inert
discount
procedure
incarcerated
gained
gains
alternatively
lures
incarceration
luring
procedurally
inherited
lurid
margin
al	

prescription
inert
discount
procedure
incarcerated
gained
gains
alternatively
lures
incarceration
luring
procedurally
inherited
lurid
margin
al	

prescription
inert
discount
procedure
incarcerated
gained
gains
alternatively
lures
incarceration
luring
procedurally
inherited
lurid
margin
al	

prescription
inert
discount
procedure
incarcerated
gained
gains
alternatively
lures
incarceration
luring
procedurally
inherited
lurid
margin
al	

prescription
inert
discount
procedure
incarcerated
gained
gains
alternatively
lures
incarceration
luring
procedurally
inherited
lurid
margin
al	

prescription
inert
discount
procedure
incarcerated
gained
gains
alternatively
lures
incarceration
luring
procedurally
inherited
lurid
margin
al	

prescription
inert
discount
procedure
incarcerated
gained
gains
alternatively
lures
incarceration
luring
procedurally
inherited
lurid
margin
al	

prescription
inert
discount
procedure
incarcerated
gained
gains
alternatively
lures
incarceration
luring
procedurally
inherited
lurid
margin
al	

prescription
inert
discount
procedure
incarcerated
gained
gains
alternatively
lures
incarceration
luring
procedurally
inherited
lurid
margin
al	

prescription
inert
discount
procedure
incarcerated
gained
gains
alternatively
lures
incarceration
luring
procedurally
inherited
lurid
margin
al	

prescription
inert
discount
procedure
incarcerated
gained
gains
alternatively
lures
incarceration
luring
procedurally
inherited
lurid
margin
al	

prescription
inert
discount
procedure
incarcerated
gained
gains
alternatively
lures
incarceration
luring
procedurally
inherited
lurid
margin
al	

prescription
inert
discount
procedure
incarcerated
gained
gains
alternatively
lures
incarceration
luring
procedurally
inherited
lurid
margin
al	

prescription
inert
discount
procedure
incarcerated
gained
gains
alternatively
lures
incarceration
luring
procedurally
inherited
lurid
margin
al	

prescription
inert
discount
procedure
incarcerated
gained
gains
alternatively
lures
incarceration
luring
procedurally
inherited
lurid
margin
al	

prescription
inert
discount
procedure
incarcerated
gained
gains
alternatively
lures
incarceration
luring
procedurally
inherited
lurid
margin
al	

prescription
inert
discount
procedure
incarcerated
gained
gains
alternatively
lures
incarceration
luring
procedurally
inherited
lurid
margin
al	

prescription
inert
discount
procedure
incarcerated
gained
gains
alternatively
lures
incarceration
luring
procedurally
inherited
lurid
margin
al	

prescription
inert
discount
procedure
incarcerated
gained
gains
alternatively
lures
inca
Human Guinea Pigs
Advanced

pre- or post-COMPREHENSION

1: **Word Association**: Brainstorm words associated with today's topic for two minutes. Present to the class.

2: **Brainstorm Questions**: Brainstorm questions that you would like to ask about today's topic. Answer the questions without looking at the article.

3: **True or False?**: Guess (before the article) or answer (after the article) whether the sentence is true or false. If false, correct the sentence.

a. Although it takes many years, quite a few drugs get approved.  
   T / F

b. Human guinea pigs are addicted to drugs.  
   T / F

c. If the drugs carries a lot of potential risk, then human guinea pigs earn more money.  
   T / F

d. Some people like the idea of easy money, and so become human guinea pigs.  
   T / F

e. There is always a chance of illness and death when taking these new drugs.  
   T / F

4: **Questions**: Answer the questions to check comprehension.

a. How long does it take and what are the chances that a new drug will get approved?  
   
   b. According to the article, what is a professional guinea pig?  
   
   c. What are some reasons that people become human guinea pigs?  
   
   d. Why is there always risk with these trials?  
   
   e. Why does the article give an example about clinical trials in France?  
   
5: **Vocabulary**: In pairs/groups, remember how the words were used in today's article.

   a. prescribed  
   b. marginal  
   c. substantial  
   d. procedures  
   e. alternative  
   f. incarceration  
   g. gainful  
   h. lured  
   i. discounted  
   j. inherent

6: **Fragments**: Remember how the fragments were used, and complete the sentence from today's article.

a. As may be expected, there are many stages during this lengthy process, one of...

b. Enter the professional guinea pigs, or people who...

c. And of course, with an increased number of procedures and risk...

d. A few test subjects just cannot find gainful employment because...

e. Whatever the reason for testing drugs, the possibility of...
1: **Vocabulary:** Circle any additional unknown words/phrases in the article. In pairs/groups, use your dictionaries to understand the meanings. Present to the class.

2: **Class Questions:** Read through the article once more, and write down any questions that you would like to discuss in pairs/groups or as a class. Discuss.

3: **Summarize:** Work with a partner to summarize the article in your own words.

4: **Discuss:** Talk about the following questions in pairs/groups. Remember to support your answers!

   a. Did you like this article?
   b. What was your general impression after reading this article?
   c. Do you think testing new drugs sounds dangerous? Why/not?
   d. What is the most dangerous thing you have ever done? Please explain.
   e. Have you ever thought your life was in jeopardy? If yes, what happened?
   f. What would you do for several thousand dollars? What wouldn't you do? Why?
   g. Is there anything unethical with testing drugs on humans, given the risks?
   h. Is there anything unethical with testing drugs on animals? Why/not?
   i. Would you ever want to become a human guinea pig? Why/not?
   j. The article provides some reasons to become a human guinea pig. What are some other reasons?

5: **Discuss:** All jobs have some dangers. Brainstorm with a partner what dangers exist for the following jobs. Be sure to explain your answers.

<table>
<thead>
<tr>
<th>Job</th>
<th>Danger</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEO</td>
<td></td>
</tr>
<tr>
<td>doctor</td>
<td></td>
</tr>
<tr>
<td>student</td>
<td></td>
</tr>
<tr>
<td>travel writer</td>
<td></td>
</tr>
<tr>
<td>waiter / waitress</td>
<td></td>
</tr>
</tbody>
</table>

6: **Google Search:** Type "human guinea pigs" into Google news and read additional articles on this topic. Discuss or write an essay about your findings.
Human Guinea Pigs

Every drug prescribed by a doctor requires a long journey from the laboratory to your medicine cabinet. All in all, it takes about twelve years, and there exists but a marginal chance that the experimental drug will be approved, approximately a 1 in 5000 chance. As may be expected, there are many stages during this lengthy process, one of which is the initial clinical trials.

Enter the professional guinea pigs, or people who sell their bodies for drug research. During these clinical trials, a small number of perfectly healthy people take the newly developed drug for the first time, and this allows the pharmaceutical companies to identify safe dosages and any possible side effects. The pay is substantial, as volunteers can earn several thousand dollars in just a few weeks. And of course, with an increased number of procedures and risk, the potential to earn more money also increases.

Some people become human guinea pigs because they cannot find alternative work, as perhaps they have a history of incarceration. A few test subjects just cannot find gainful employment because of a somewhat sluggish economy. And others are lured by easy money without much of a time commitment, and thus they can pursue other interests.

Whatever the reason for testing drugs, the possibility of severe complications or even death should not be discounted. There exists an inherent risk because no one exactly knows how the human body will react to the new drug, even if the risk is minimized as much as possible. In 2016, for example, five volunteers were hospitalized and one volunteer died during clinical trials in France.

Notes:
Human Guinea Pigs

STUDENT HANDOUT (fill in the blank)

Fill in the blank with the correct word.

<table>
<thead>
<tr>
<th>incarceration</th>
<th>substantial</th>
<th>clinical</th>
<th>gainful</th>
<th>effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>inherent</td>
<td>lured</td>
<td>discounted</td>
<td>marginal</td>
<td>procedures</td>
</tr>
<tr>
<td>prescribed</td>
<td>hospitalized</td>
<td>alternative</td>
<td>pharmaceutical</td>
<td>perfectly</td>
</tr>
</tbody>
</table>

Human Guinea Pigs

Every drug (a. _______________) by a doctor requires a long journey from the laboratory to your medicine cabinet. All in all, it takes about twelve years, and there exists but a (b. _______________) chance that the experimental drug will be approved, approximately a 1 in 5000 chance. As may be expected, there are many stages during this lengthy process, one of which is the initial (c. _______________) trials.

Enter the professional guinea pigs, or people who sell their bodies for drug research. During these clinical trials, a small number of (d. _______________) healthy people take the newly developed drug for the first time, and this allows the (e. _______________) companies to identify safe dosages and any possible side (f. ________________). The pay is (g. _______________), as volunteers can earn several thousand dollars in just a few weeks. And of course, with an increased number of (h. _______________) and risk, the potential to earn more money also increases.

Some people become human guinea pigs because they cannot find (i. _______________) work, as perhaps they have a history of (j. ________________). A few test subjects just cannot find (k. _______________) employment because of a somewhat sluggish economy. And others are (l. _______________) by easy money without much of a time commitment, and thus they can pursue other interests.

Whatever the reason for testing drugs, the possibility of severe complications or even death should not be (m. ________________). There exists an (n. ________________) risk because no one exactly knows how the human body will react to the new drug, even if the risk is minimized as much as possible. In 2016, for example, five volunteers were (o. _______________) and one volunteer died during clinical trials in France.
STUDENT HANDOUT (extended listening)

Listen and fill in the missing sentences. Compare your answers with a partner, and then listen once more.

Human Guinea Pigs

Every drug prescribed by a doctor requires a long journey from the laboratory to your medicine cabinet. All in all, it takes about twelve years, approximately a 1 in 5000 chance. As may be expected, there are many stages during this lengthy process, one of which is the initial clinical trials.

Enter the professional guinea pigs, or people who sell their bodies for drug research. During these clinical trials, and this allows the pharmaceutical companies to identify safe dosages and any possible side effects. The pay is substantial, as volunteers can earn several thousand dollars in just a few weeks. And of course, with an increased number of procedures and risk, the potential to earn more money also increases.

As perhaps they have a history of incarceration. A few test subjects just cannot find gainful employment because of a somewhat sluggish economy. And thus they can pursue other interests.

Whatever the reason for testing drugs, the possibility of severe complications or even death should not be discounted. Even if the risk is minimized as much as possible. In 2016, for example, five volunteers were hospitalized and one volunteer died during clinical trials in France.
ANSWER KEY

Vocabulary

1. Vocabulary Match:

   a. w    b. s    c. z    d. d    e. t
   f. y    g. r    h. u    i. x    j. v

2. Fill in the Blanks:

   a. prescribed    b. marginal    c. substantial    d. procedures    e. alternative
   f. incarceration    g. gainful    h. lured    i. discounted    j. inherent

pre- or post-Comprehension

1. True or False:

   a. F    b. F    c. T    d. T    e. T

2. Fragments:

   a. which is the initial clinical trials.
   b. sell their bodies for drug research.
   c. the potential to earn more money also increases.
   d. of a somewhat sluggish economy.
   e. severe complications or even death should not be discounted.

Student Handout

1. Fill in the Blanks

   a. prescribed    b. marginal    c. clinical    d. perfectly    e. pharmaceutical
   f. effects    g. substantial    h. procedures    i. alternative    j. incarceration
   k. gainful    l. lured    m. discounted    n. inherent    o. hospitalized

2. Extended Listening

   a. and there exists but a marginal chance that the experimental drug will be approved
   b. a small number of perfectly healthy people take the newly developed drug for the first time
   c. Some people become human guinea pigs because they cannot find alternative work
   d. And others are lured by easy money without much of a time commitment
   e. There exists an inherent risk because no one exactly knows how the human body will react to the new drug