Instead of studying, Jennifer went out with her friends last night, so she's poorly prepared for today's biology exam. Her level of stress is high because she is thinking about, or 1 ________, this particular 2 ________, or test, as beyond her coping abilities.

Jennifer's response was first described by Walter 3 ________ and later refined by physiologists who identified a 4 ________ system, in which the 5 ________ nervous system directs the 6 ________ glands to release the stress hormones 7 ________ and 8 ________.

These hormones are responsible for Jennifer's 9 ________ (immediate/sustained) response to stress.

At the same time, the brain's 10 ________ by way of the 11 ________ and the pituitary gland, directs the 12 ________ glands to release the 13 ________ stress hormones, such as 14 ________.

These hormones are responsible for Jennifer's 15 ________ (immediate/sustained) response to stress.

When stressed, Jennifer's autonomic nervous system (ANS) does not distinguish between a difficult test and an attacking lion. Either way, the ANS responds by increasing her 16 ________ rate and respiration, diverting blood from digestion to her skeletal 17 ________, and releasing sugar and fat to prepare her body for 18 ________ or 19 ________.

(Continued on the next page.)
Driving home after class, Jennifer notices her car is overheating, then sees flames bursting from under the hood. In response to this new stressor, her heart begins to beat wildly and she feels faint, what Hans 20 called the alarm reaction or the 21 syndrome.

In the second phase of the syndrome, called 22, she swerves over to the side of the road and leaps out of her car.

The firefighters who extinguish the flames also comfort Jennifer, but the combined stresses of the day have led her to the third stage, 23.

A few days later, Jennifer comes down with a wicked cold, which might be an effect of the stress weakening her 24 system, including the activity of the 25 and 26.

Answers may be found in the Appendix at the end of this booklet.
Malcolm has been trying to quit smoking for years, but it's very difficult.

He started smoking during early

for two main reasons:

He wanted to look cool and grown-up, so he

his behavior after admired actors he'd seen smoking in movies,

and he felt pressured by his

who were already smoking.

Today, 20 years later, Malcolm has tried several techniques for quitting (the patch, gum, etc.), but nothing works because

he is on nicotine. In fact, he now needs two packs instead of one to get the same effect, because he has developed a

for the drug.

Malcolm's addiction is due to several factors:

First, nicotine triggers the release of

and

which boosts

and mental efficiency, abilities that Malcolm feels are important for his work.

Second, nicotine stimulates the central nervous system to release

that

reduce sensitivity to


To make matters worse, Malcolm's family and friends, almost all of whom smoke, (will/will not) support his efforts by quitting with him.

Answers may be found in the Appendix at the end of this booklet.