



在线

**Smarter Balanced Assessments 与
Hawai'i State Science (NGSS)
Assessments 家长信息手册**

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每一位家长都应该了解的 Smarter Balanced Assessments 与 Hawai'i State Science (NGSS) Assessments 相关信息

我的孩子将参加哪些考试？

如果您的孩子上 3 - 8 年级或 11 年级，则其将参加 Hawai'i Smarter Balanced English Language Arts/Literacy 以及 Mathematics Assessments。Smarter Balanced English Language Arts/Literacy Assessment 包含计算机自适应测试（computer adaptive test, CAT）以及表现性任务（performance task, PT）。Smarter Balanced Mathematics Assessment 仅包含计算机自适应测试（computer adaptive test, CAT）。如果您的孩子上 5 或 8 年级，则其也将参加 Hawai'i State Science (NGSS) Assessment。

考试将于何时进行？

您的孩子将参加一次各内容板块的 Smarter Balanced English Language Arts/Literacy 以及 Mathematics Assessments。Smarter Balanced Assessments 的测验时间信息请参见 alohahsap.org。您孩子的学校将向您告知学校的测验安排以及您的孩子将于何时参加各内容板块的考试。

Hawai'i State Science (NGSS) Assessments 的测验时间信息请参见 alohahsap.org。您孩子的学校将向您通知学校的测验安排，以及您的孩子将参加一次还是两次 Hawai'i State Science (NGSS) Assessment。

如果我的孩子多次参加自适应在线 Hawai'i State Science (NGSS) Assessment（英语版），他或她是否将看到同样的问题？

在线测验系统将记录您的孩子每次参加 Hawai'i State Science (NGSS) Assessment 时回答的问题。该系统还将在您孩子回答问题时进行调节，以适应他或她的知识与技能，从而提供有关其表现的最准确信息。您的孩子每次回答问题时，他或她的回答将决定他或她将得到的下一个问题。每次参加 Hawai'i State Science (NGSS) Assessment 时，您的孩子都将得到不同的套题。如果您的孩子多次参加 Hawai'i State Science (NGSS) Assessment，我们仅将最高分保存为他或她的正式记录。

每次考试需要用多少时间？

Hawai'i State Science (NGSS) Assessment 将持续约两个小时。Smarter Balanced English Language Arts/Literacy Assessment 将持续约 2 到 3 1/2 小时。Smarter Balanced Mathematics Assessment 将持续约 1 至 2 小时。我们将可能给您的孩子更多时间，以便其完成每次考试。您的孩子可以退出考试，然后于另一天返回继续完成。在线测验系统将记录您孩子已回答的问题，并在其继续参加考试时显示出其余问题。

我的孩子需要掌握何种计算机技能才能参加考试？

考试中的问题需要您的孩子从一组可能的答案中选定一个答案，拖放并移动对象，然后将回答内容直接输入到测验系统中。您的孩子将在参加在线考试过程中使用鼠标或键盘或者结合使用二者，但是并不要求您的孩子是计算机专家或打字高手。

学生也可在考试过程中选择使用部分在线工具帮助作答。学生可以：

- 放大文字和图像；
- 高亮显示重点信息；
- 删去错误答案选项；并
- 标记待复查的问题。

我们鼓励学生练习回答考试中将包含的问题类型。每个年级水平或年级水平段内容版块练习和训练测验以及考试都可访问 alohahsap.org。

家庭将于何时得到考试结果？

您的家庭将于下一学年的开始（九月份）收到您孩子最终得分的纸质成绩单。

我该如何帮助我的孩子为此次考试进行准备？

您能为孩子提供的最佳帮助就是提供始终如一的支持，让孩子每天都在学校里有良好的表现。确保您的孩子得到充足的睡眠、食用营养早餐、完成家庭作业，并每天到校学习。Smarter Balanced Assessments 以及 Hawai'i State Science (NGSS) Assessments 将衡量您的孩子符合综合内容版块标准的程度，该标准将帮助指导您的孩子在整个学年每天好好学习。

您也可与您的孩子共同查看本手册并访问 alohahsap.org 回答其它内容版块练习与训练测验问题，帮助您的孩子熟悉他或她将要回答的问题类型。

我的孩子可以得到哪些无障碍支持？

考试提供无障碍选项，以帮助**所有**学生，包括英语学习者和其他残障学生，通过州考试展现其掌握的知识和能力。独立环境、文本语音和盲文等无障碍支持可以帮助学生查看考试问题和答案选项。如需了解更多关于无障碍选项的信息，请访问 alohahsap.org 并导航至 Resources 部分。

Smarter Balanced Assessments 与 Hawai'i State Science (NGSS) Assessments 的样题

学生需要回答几个不同的在线考试问题类型：

- 选择题，在这类问题中，学生将从一组可能的选项中选出一个答案
- 构建题型：
 - 自然语言问题，在这类问题中，学生将在答案区输入简短及稍长的回答内容
 - 互动式问题，在这类问题中，学生将使用鼠标或键盘在答案区（又叫网格）内移动项目或者拖动答案
 - 方程编辑器问题，在这类问题中，学生将输入任何的数学表达式或方程式
 - 模拟提示，在这类题型中，学生将通过数据交互提供多种形式的答案

学生还必须在 Hawai'i State Science (NGSS) 在线考试上回答以下类型的问题：

- 从集题型，旨在让学生参与符合特定 NGSS 发展目标预期的相应年级的有意义的科学活动。每道从集题均以现实现象开头，后跟相关数据，并包括两项或以上的相互作用，要求学生展示运用科学和工程实践的能力、学科核心理念以及发展目标预期所述的跨领域概念。
- 独立式题型，为学生提供一种现象，后面通常是围绕一项任务需求的单一相互作用。

以下问题举例说明您的孩子将需要在 Hawai'i Smarter Balanced English Language Arts/Literacy 和 Mathematics Assessments 以及 Hawai'i State Science (NGSS) Assessments 中回答的问题。我们将为 3、5、6、7 以及 11 年级的学生提供 Smarter Balanced 英语或数学问题。并将为 5 年级和 8 年级的学生提供 Hawai'i State Science (NGSS) Assessment 问题。每个问题都包含正确答案和其它评分信息。

如果您希望看到更多问题，请访问 alohahsap.org。

3 年级

科目：Smarter Balanced 数学

Hawai'i Common Core Standard: 3.MD.3: 1 | MD | H-3 | a/s | 3.MD.3: 绘制一份按比例的比例图以及一份按比例的比例图，表示有多个类别的数据集。使用按比例的比例图中所展现的信息，解答一步和两步“多多少”以及“少多少”这两个问题。例如：绘制一份比例图，令柱状图中的每个正方形都代表 5 个宠物。

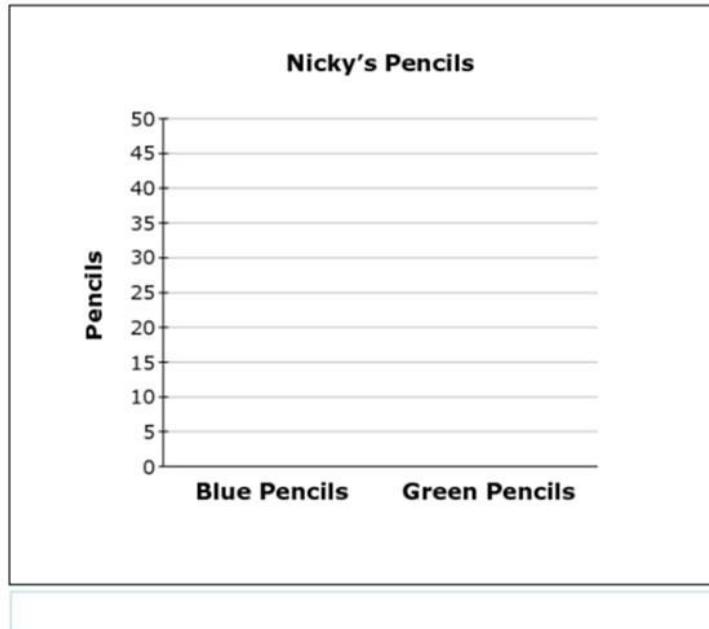
和
3.OA.8:1 | OA | D-3 | m | 3.OA.8: 通过四步操作解答两步数学应用题使用以字母代表未知数的方程式表示这些问题。使用心算和包括四舍五入在内的估算方法评估答案的合理性。

问题类型：构建题型——交互（网格）（1 分）

Nicky has 4 packs of pencils.
Each pack contains 15 pencils. In
each pack, 5 pencils are blue and
the rest green.

Create a bar graph to show how
many of each color pencil Nicky
has.

Click the graph to show where
the top of the bar should go.

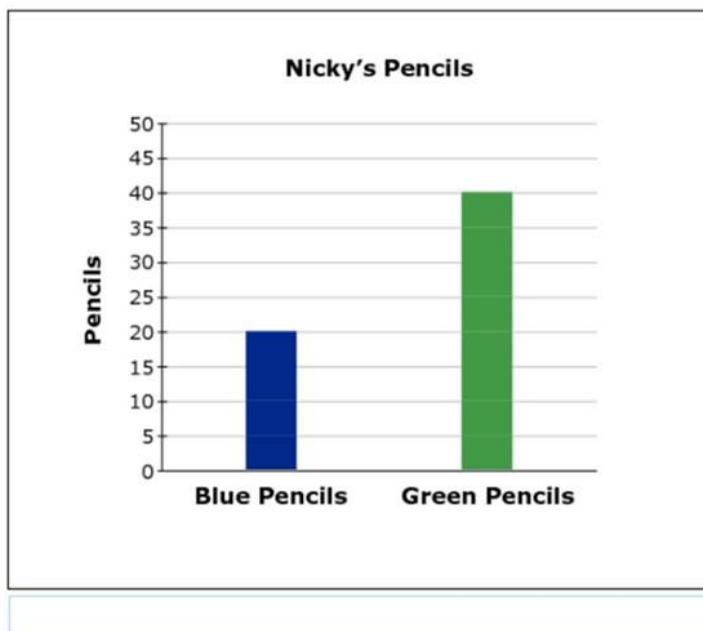


要得到一分，学生必须创建条形图，表明 Nicky 有 20 根蓝色的铅笔和 40 根绿色的铅笔。

Nicky has 4 packs of pencils.
Each pack contains 15 pencils. In
each pack, 5 pencils are blue and
the rest green.

Create a bar graph to show how
many of each color pencil Nicky
has.

Click the graph to show where
the top of the bar should go.



5 年级

科目：Hawai'i Science (NGSS)

Hawai'i 下一代科学标准：使用模型来描述动物食物中的能量（用于身体修复、生长、运动和保持身体温暖）之前是来自太阳的能量。（5 PS3-1）

问题类型：独立式问题（3 分）

An alpine marmot eats grass and seeds. In the fall, the marmot weighs more than it did in the spring.

Put the pictures in the correct order to show the flow of energy through the system.

- In Table 1, select a number for each picture to indicate the correct location in Figure 1.
- If a picture is **not** used in Figure 1, select "not used."

Figure 1. Energy Flow Model

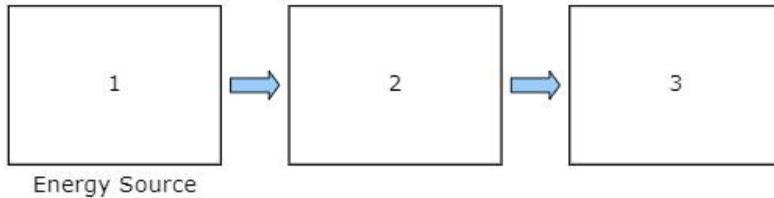


Table 1. Energy Flow Model Order

	Sun	Water	Marmot	Grass and Seeds
Picture				
Location	<input type="text" value=""/>	<input type="text" value=""/>	<input type="text" value=""/>	<input type="text" value=""/>

得分：

选择以下每项内容得 1 分：

- 学生指出太阳出现在草地前的模型中。
- 学生指出草地出现在土拨鼠前的模型中。
- 学生未在模型中使用水。

正确答案如下所示：

An alpine marmot eats grass and seeds. In the fall, the marmot weighs more than it did in the spring.

Put the pictures in the correct order to show the flow of energy through the system.

- In Table 1, select a number for each picture to indicate the correct location in Figure 1.
- If a picture is **not** used in Figure 1, select "not used."

Figure 1. Energy Flow Model

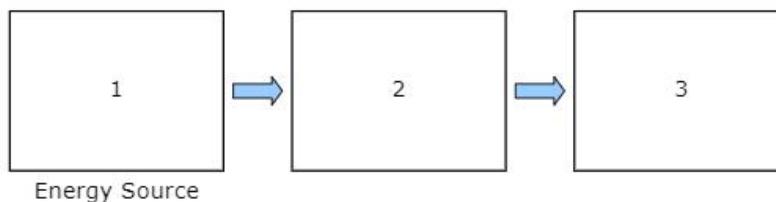


Table 1. Energy Flow Model Order

	Sun	Water	Marmot	Grass and Seeds
Picture				
Location	1 ▾	not used ▾	3 ▾	2 ▾

5 年级

科目： Hawai'i Science (NGSS)

Hawai'i 下一代科学标准： 论证为减少气候相关危害造成的影响的设计解决方案的优点。(3 ESS3-1)

问题类型： 丛集问题 (9 分)

刺激物：

A house near the ocean in Surfside, New Jersey, is built on stilts.

Sometimes, when buildings are built near areas that are likely to flood, they are built on stilts. This allows the house and its contents to remain safe if the area floods. An example is shown in Figure 1.

Figure 1. Stilt House



Your Task

In the questions that follow, you will make a claim about the effectiveness of stilts as a solution to flooding.

相互作用：

Part A

Select the boxes to identify whether stilts on a house protect against or do **not** protect against each of the actions.

	Protects Against	Does Not Protect Against
Household objects being washed away	<input type="checkbox"/>	<input type="checkbox"/>
Water damage to floors	<input type="checkbox"/>	<input type="checkbox"/>
Water damage to household objects	<input type="checkbox"/>	<input type="checkbox"/>
Yard flooding	<input type="checkbox"/>	<input type="checkbox"/>

Part B

Select **three** conditions that the stilts must meet to allow a building and its contents to remain safe if the area floods.

- cost a lot of money
- resist strong water current
- match the building's appearance
- support the weight of the building
- be tall enough to keep the building out of water

Part C

Choose **three** problems that could be caused by using stilts under buildings.

- Buildings with stilts provide a better view.
- The stilts will get wet during a storm or flooding.
- Buildings would be damaged if stilts were to fail.
- Buildings are harder to enter because of stairs and ramps.
- Stilts can cause buildings to move side to side in high winds.

Part D

Are stilts a good solution to allow a building and its contents to remain safe if an area floods?

Click on each blank box to select the word or phrase that completes the sentences.

Stilts could be a solution to flooding because they
. This means that
.

得分：

A 部分中选择以下内容得 1 分：

- 学生为“家用物品被冲走”、“地板被水损坏”和“家庭用品被水损坏”选择“避免”。
- 和
- 学生为“院子遭遇洪水”选择“无法避免”。

Part A

Select the boxes to identify whether stilts on a house protect against or do **not** protect against each of the actions.

	Protects Against	Does Not Protect Against
Household objects being washed away	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Water damage to floors	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Water damage to household objects	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Yard flooding	<input type="checkbox"/>	<input checked="" type="checkbox"/>

B 部分中选择以下三个答案可得 3 分：

- “抵抗强大水流”
- “支撑建筑物重量”
- “足够高，能够防止建筑物进水”

Part B

Select **three** conditions that the stilts must meet to allow a building and its contents to remain safe if the area floods.

- cost a lot of money
- resist strong water current
- match the building's appearance
- support the weight of the building
- be tall enough to keep the building out of water

C 部分中选择以下答案可得 3 分：

- “如果支撑柱失效，建筑物将会受损。”
- “由于有楼梯和坡道，更难进入建筑物。”
- “支撑柱导致建筑物在强风中左右移动。”

Part C

Choose **three** problems that could be caused by using stilts under buildings.

- Buildings with stilts provide a better view.
- The stilts will get wet during a storm or flooding.
- Buildings would be damaged if stilts were to fail.
- Buildings are harder to enter because of stairs and ramps.
- Stilts can cause buildings to move side to side in high winds.

D 部分中选择下拉列表中的以下内容得 2 分：

- 学生在第一个下拉列表中选择“好”并在第二个下拉列表中选择“允许水从建筑物下方通过”，或者学生在第一个下拉列表中选择“不好”，“如果失败则会损坏建筑物”或在第二个下拉列表中选择“花费太多”（1 分）
- 学生在第三个下拉列表中选择与前两个下拉列表中构建的句子相对应的答案。（1 分）
 - 对于“花费太多”，学生选择“花费在支撑柱上的钱用在其他地方更好”
 - 对于“如果失败则会损坏建筑物”，学生选择“支撑柱会带来新的危险”。
 - 对于“允许水从建筑物下方通过”，学生选择“支撑柱通过减少建筑物遭遇洪水侵蚀的可能性来提高安全性”。

D 部分满分答案的示例如下：

Part D

Are stilts a good solution to allow a building and its contents to remain safe if an area floods?

Click on each blank box to select the word or phrase that completes the sentences.

Stilts could be a solution to flooding because they . This means that .

Part D

Are stilts a good solution to allow a building and its contents to remain safe if an area floods?

Click on each blank box to select the word or phrase that completes the sentences.

Stilts could be a solution to flooding because they . This means that .

Part D

Are stilts a good solution to allow a building and its contents to remain safe if an area floods?

Click on each blank box to select the word or phrase that completes the sentences.

Stilts could be a solution to flooding because they . This means that .

5 年级

科目：Smarter Balanced 英语

Hawai'i Common Core Standard: 2-3:4-CR | 2-3: 解释并整合信息：

找出支持中心思想和副标题的信息；从数据或打印及非打印文本资源中选取并整合信息。

问题类型： 选择题——表匹配项目（1 分）

A student is writing a research report about tree frogs. The student took notes and thought of three main ideas for her report. Click on the box to show the **best** main idea that each note supports.

	Main Idea A: How Tree Frogs Grow	Main Idea B: Where Tree Frogs Live	Main Idea C: What Tree Frogs Look Like
Note 1: Tree frogs can be found on the ground, in small plants, or in trees.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Note 2: Some tree frogs change color to hide in what is around them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Note 3: Tree frogs dig a hole in the ground to stay warm when it is cold outside.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Note 4: It takes weeks for baby tree frogs to jump because, at first, they have no legs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

要得到一分，学生必须单击能够支持以下内容的复选框：注释 1 支持中心思想 B，注释 2 支持中心思想 C，注释 3 支持中心思想 B，注释 4 支持中心思想 A。

A student is writing a research report about tree frogs. The student took notes and thought of three main ideas for her report. Click on the box to show the **best** main idea that each note supports.

	Main Idea A: How Tree Frogs Grow	Main Idea B: Where Tree Frogs Live	Main Idea C: What Tree Frogs Look Like
Note 1: Tree frogs can be found on the ground, in small plants, or in trees.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Note 2: Some tree frogs change color to hide in what is around them.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Note 3: Tree frogs dig a hole in the ground to stay warm when it is cold outside.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Note 4: It takes weeks for baby tree frogs to jump because, at first, they have no legs.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

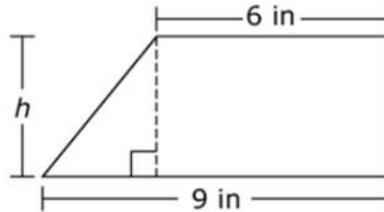
6 年级

科目：Smarter Balanced 数学

Hawai'i Common Core Standard: H-6:1 | G | H-6: 解答涉及面积、表面积和体积的现实生活与数学问题。

问题类型：构建题型——方程式编辑器（1 分）

The trapezoid shown is divided into a right triangle and a rectangle.



Use the Equation Tool to create an expression that could be used to determine the area of the trapezoid.

Equation Editor Interface:

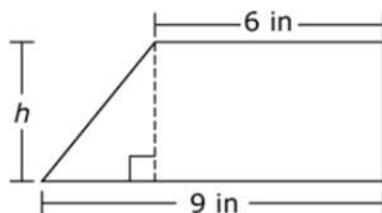
Input field:

Navigation: \leftarrow \rightarrow \curvearrowright \curvearrowleft \times

1	2	3	h
4	5	6	$+$ $-$ $*$ \div
7	8	9	$<$ $=$ $>$
0	.	-	$\frac{\square}{\square}$ \square^\square $()$ $ $

要得到一分，学生必须输入方程式（或与之相当的等式） $\frac{1}{2}(3 \times h) + (h \times 6)$.

The trapezoid shown is divided into a right triangle and a rectangle.



Use the Equation Tool to create an expression that could be used to determine the area of the trapezoid.

$$\frac{1}{2}(3 \cdot h) + (h \cdot 6)$$

← → ↶ ↷ ✖

1	2	3	h
4	5	6	+ - * ÷
7	8	9	< = >
0	.	-	$\frac{\square}{\square}$ \square^\square $()$ $ $

7 年级

科目：Smarter Balanced 英语

Hawai'i Common Core Standard: 3-6: 2-W | 3-6: 书写/修改简短文字：运用多种策略，撰写或修改一段或多段说明文：通过表述并保持中心点/语气来组织思想；生成主题（包含相关支持性证据/词汇和详尽阐述），或者提供与目的和读者相应的结论。

问题类型：构建题型——详答题（2 分）

A student is writing a report for English class about folk heroes. Read the draft of his introduction and conclusion and complete the task that follows.

You may never have heard of John Chapman, but you probably have heard of Johnny Appleseed. He was an American folk hero and pioneer who was born in Massachusetts in 1774. When he was eighteen years old, he decided to help the pioneers who were moving west. He had a dream of growing apple trees and giving apple seeds to them. That way, they would never go hungry.

Many people said that Johnny was a cheerful and generous man who loved the wilderness and was gentle with animals. What he is most known for today, though, is walking the countryside and planting apples. He did this for almost fifty years. To this day, many festivals are held every year to honor him. Next time you bite into a crispy, juicy apple, thank Johnny Appleseed.

The student took these notes from credible sources:

- Planted seeds along roadways, forests, and near rivers
- Traveled from Massachusetts to Pennsylvania
- Spent 50 years walking the countryside
- Stayed ahead of settlers
- Planted apple seeds along roadways and in forests as he moved west
- Planted seeds anywhere pioneers would settle
- Got seeds for free from cider mills and kept them in leather bags
- First nickname was the "apple seed man"
- Later called "Johnny Appleseed"
- Made friends with Indian tribes
- Learned some Indian languages
- Lots of festivals named after him
- Children loved him and listened to his stories
- Was generous and kind
- When invited for a meal, would not eat until the whole family had had enough food
- Was kind to animals
- Bought a horse that was going to be put to sleep and gave the horse to someone needy to keep his promise to treat the horse kindly
- Wore apple sacks for clothing and gave nice clothes to settlers

Write one or two body paragraphs using appropriate details from the student's notes to explain the "man behind the legend" without repeating the ideas presented in the first and last paragraphs.

要得到两分，学生必须提供符合逻辑性的相关观点/理由/细节和/或证据，支持与 Johnny Appleseed 传奇故事背后真实人物相关的主要观点/论点/中心思想，以便使内容更有说服力，并且运用准确的词汇/语言清晰而有效地详细阐述观点。

American folk hero and pioneer who was born in Massachusetts in 1774. When he was eighteen years old, he decided to help the pioneers who were moving west. He had a dream of growing apple trees and giving apple seeds to them. That way, they would never go hungry.

Many people said that Johnny was a cheerful and generous man who loved the wilderness and was gentle with animals. What he is most known for today, though, is walking the countryside and planting apples. He did this for almost fifty years. To this day, many festivals are held every year to honor him. Next time you bite into a crispy, juicy apple, thank Johnny Appleseed.

The student took these notes from credible sources:

- Planted seeds along roadways, forests, and near rivers
- Traveled from Massachusetts to Pennsylvania
- Spent 50 years walking the countryside
- Stayed ahead of settlers
- Planted apple seeds along roadways and in forests as he moved west
- Planted seeds anywhere pioneers would settle
- Got seeds for free from cider mills and kept them in leather bags
- First nickname was the "apple seed man"
- Later called "Johnny Appleseed"
- Made friends with Indian tribes
- Learned some Indian languages
- Lots of festivals named after him
- Children loved him and listened to his stories
- Was generous and kind
- When invited for a meal, would not eat until the whole family had had enough food
- Was kind to animals
- Bought a horse that was going to be put to sleep and gave the horse to someone needy to keep his promise to treat the horse kindly
- Wore apple sacks for clothing and gave nice clothes to settlers

Write one or two body paragraphs using appropriate details from the student's notes to explain the "man behind the legend" without repeating the ideas presented in the first and last paragraphs.

John Chapman traveled from Massachusetts to Pennsylvania, keeping ahead of the settlements. Every year, he planted apple seeds farther west. He carried a leather bag filled with apple seeds that he collected from cider mills. He would take the seeds from the bag and plant them along roadways, in forests, and in other places where pioneers settled. He was soon known as the "apple seed man" and later as "Johnny Appleseed." Sometimes on his travels, he would be invited to have a meal with a pioneer family. He would not start eating, though, until he knew the whole family would have enough food. The children loved his stories, and their

8 年级

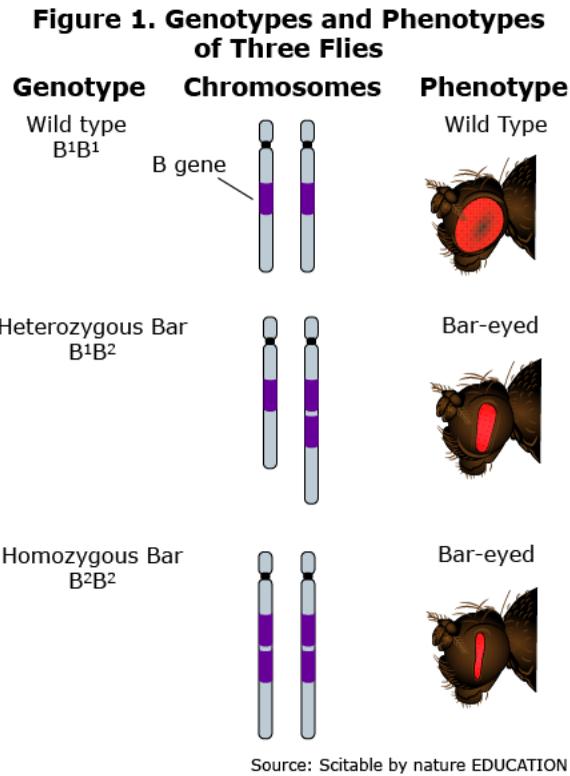
科目：Hawai'i Science (NGSS)

Hawai'i 下一代科学标准：设计并使用模型来描述为何位于染色体上的基因结构变化（突变）可能会影响蛋白质，并可能对生物体的结构和功能产生有害、有益或中性的影响。(MS-LS3-1)

问题类型：独立式问题（2 分）

Flies with bar-eyed phenotypes cannot see as well as those with wild type phenotypes.

The genotypes and phenotypes of three flies are shown in Figure 1.



Click on each blank box to select the statements that complete the chain of events explaining how the bar-eyed mutation reduces a fly's eyesight.

Chain of Events

Step	Event
1	<input type="text"/>
2	<input type="text"/>
3	<input type="text"/>
4	The eyesight of a fly is reduced.

选择以下每项内容得 1 分：

- 学生在“蛋白质合成过程中发生变化”之前紧邻的一个步骤中选择“一条染色体有一个以上的 B 基因拷贝”。（1 分）
- 学生在“苍蝇的眼睛结构变得更窄”之前紧邻的一个步骤中选择“蛋白质合成过程中发生变化”。（1 分）

选择以下每项内容得 1 分：

正确答案如下所示：

Chain of Events

Step	Event
1	A chromosome has more than one copy of the B gene. ▼
2	There is a change in the protein production. ▼
3	The fly's eye structures become narrower. ▼
4	The eyesight of a fly is reduced.

8 年级

科目： Hawai'i Science (NGSS)

Hawai'i 下一代科学标准： 组织、使用和提出论据以支持以下论点：当物体的动能发生变化时，能量将被传递至物体，或从物体传出。(MS-PS3-5)

问题类型： 丛集问题（9 分）

刺激物：

Sparks fly off the wheels of a train when the brakes are applied.

Click the small gray arrow to see a demonstration of this happening in Animation 1.

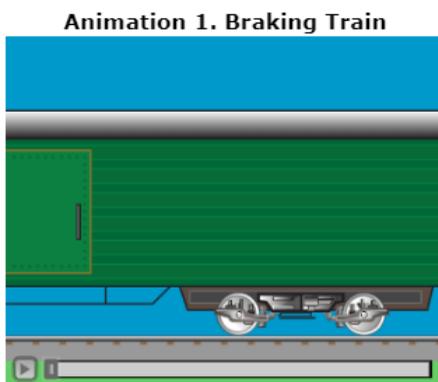


Table 1 explains some properties of the train and its surroundings as energy flows throughout the system.

Table 1. Properties of the Train System

Before Brakes Are Applied	After Brakes Applied
No sparks	Sparks fly off the wheels and brake pads
Brake pads make no sound	Brake pads make sound
Brake pads are cold	Brake pads are hot
Wheels are warm	Wheels are hot
Rails are warm	Rails are warmer
Train is moving fast	Train is moving slow

Your Task

In the questions that follow, you will analyze what happens to the train when the brakes are applied.

相互作用：

Part A

Click on each blank box to select the word or phrase that completes each sentence, constructing an argument about what happens when the train's brakes are applied.

Applying the brakes causes the to transfer kinetic energy to the . This causes the to slow down and have kinetic energy, which slows the train.

Part B

When the train applies its brakes, what happens to the energy of the surroundings?

- A The surroundings gain energy.
- B The surroundings lose energy.
- C The surroundings do not gain or lose energy.
- D There is not enough information to determine the energy of the surroundings.

Part C

Which **three** statements support your choice in part B?

- The train maintains its speed.
- Sound is produced.
- Sound is consumed.
- Light is produced.
- Light is consumed.
- Heat is produced.
- Heat is consumed.

Part D

Select **three** pieces of evidence that would support the claim that the kinetic energy of the wheels changed form.

- The brakes give off energy as heat.
 - The brakes make a screeching sound.
 - The brakes undergo a chemical reaction.
 - The sparks that fly off the wheels give off light.
 - The potential energy of the train increases as it slows.
-

得分：

A 部分中选择以下内容得 2 分：

- 学生在第一个空白处选择“车轮”，在第二个空白处选择“制动器”或“轨道”。（1 分）
- 学生在第三个空白处选择“车轮”，在第四个空白处选择“减少”。（1 分）

Part A

Click on each blank box to select the word or phrase that completes each sentence, constructing an argument about what happens when the train's brakes are applied.

Applying the brakes causes the to transfer kinetic energy to the . This causes the to slow down and have kinetic energy, which slows the train.

B 部分中选择“周围环境获得能量”得 1 分

Part B

When the train applies its brakes, what happens to the energy of the surroundings?

- A The surroundings gain energy.
- B The surroundings lose energy.
- C The surroundings do not gain or lose energy.
- D There is not enough information to determine the energy of the surroundings.

C 部分中选择以下内容得 3 分：

- “产生声音。”
- “产生光线。”
- “产生热量。”

Part C

Which **three** statements support your choice in part B?

- A The train maintains its speed.
- B Sound is produced.
- C Sound is consumed.
- D Light is produced.
- E Light is consumed.
- F Heat is produced.
- G Heat is consumed.

D 部分中选择以下内容得 3 分：

- “制动器以热量的形式释放能量。”
- “制动器发出尖锐的声音。”
- “从车轮上飞出的火花产生光线。”

Part D

Select **three** pieces of evidence that would support the claim that the kinetic energy of the wheels changed form.

- The brakes give off energy as heat.
- The brakes make a screeching sound.
- The brakes undergo a chemical reaction.
- The sparks that fly off the wheels give off light.
- The potential energy of the train increases as it slows.

11 年级

科目：Smarter Balanced 数学

Hawai'i Common Core Standard: A-REI.C: 求解方程组。

问题类型： 构建题型——方程式题型（1 分）

The basketball team sold t-shirts and hats as a fund-raiser. They sold a total of 23 items and made a profit of \$246. They made a profit of \$10 for every t-shirt they sold and \$12 for every hat they sold.

Determine the number of t-shirts and the number of hats the basketball team sold.

Enter the number of t-shirts in the first response box.

Enter the number of hats in the second response box.

←	→	↶	↷	✖
1	2	3		
4	5	6		
7	8	9		
0	.	-		

要得到一分，学生必须在第一个答题框中输入 15 作为已售出 T 恤的件数，在第二个答题框中输入 8 作为帽子数。

The basketball team sold t-shirts and hats as a fund-raiser. They sold a total of 23 items and made a profit of \$246. They made a profit of \$10 for every t-shirt they sold and \$12 for every hat they sold.

Determine the number of t-shirts and the number of hats the basketball team sold.

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