SAMOAN

Hawai'i Statewide Assessment Program

Tusi o Fa'ama a'amatalaga mo Mātua i luga o le Initaneti e fa'atatau i Smarter Balanced Assessments ma Hawai‘i State Science (NGSS) Assessments

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O a su'ega e su'e e la'u tama?

Afai o lo'o a'oga lou alo i vasega 3-8 po'o le 11, o le a su'eina e lou alo le Hawai'i Smarter Balanced English Language Arts/Literacy ma le Mathematics Assessments. O le Iloiloga o le Smarter Balanced English Language Arts/Literacy e aofia ai se su'ega e faia e le komepiuta (CAT) fa'apea fo'i ma se fa'atinoga o le mafai (PT). O le Iloiloga o le Smarter Balanced Mathematics e na o se su'ega e faia e le komepiuta (CAT) e aofia ai. Afai o lo'o a'oga lou alo i le vasega 5 po'o le 8, o le a su'e fo'i e lou alo le Su'ega o le Saienisi a le Setete o Hawaii (NGSS).

O afea e faia ai su'ega?

O le a su'e na o le fa'atasi e lou alo le Smarter Balanced English Language Arts/Literacy ma le Mathematics Assessments mo vaega ta'itasi o fa'atinoga. O lo'o maua fa'amatalaga e tusa ai ma fa'amalama o su'ega mo le Smarter Balanced Assessments i le alohahsap.org. O le a logoina oe e le a'oga a lou alo i le fa'asologa o su'ega ma le taimi e su'eina ai e lou alo vaega o fa'atinoga ta'itasi.

O lo'o maua fa'amatalaga e tusa ai ma fa'amalama o su'ega mo le Hawai'i State Science (NGSS) Assessments i le alohahsap.org. O le a logoina oe e le a'oga a lou alo i le fa'asologa o su'ega ma pe fa'atasi pe fa'alua ona su'eina e lou alo le Hawai'i State Science Assessment.

E tutusa fesili pe afai e silia i le fa'atasi ona su'e e la'u tama le Hawai'i State Science (NGSS) Assessment lea e fetu'una'i i luga o le initaneti i le gagana Peretania?

O fa'amaumauga o le faiga o su'ega i luga o le initaneti lea e fesiligia lau tama, e tali mai i taimi uma e su'e ai e lau tama le Hawai'i State Science (NGSS) Assessment. E toe fetu'una'i fo'i lenei faiga ina ia fetaui ma le iloa ma tomai o lau tama 'a'o ia taliina fesili ina ia maua mai ai fa'amatalaga aupito sa'o e tusa ai ma lana taumafaiga. O taimi uma e tali ai e lau tama se fesili, o lana tali e fesoasoani e fa'ailoa ai le isi fesili o le a ia mauaina. E eseese fesili o le a tu'uina atu i lau tama i taimi uma na te su'eina ai le Hawai'i State Science (NGSS) Assessment. Afai e silia i le fa'atasi ona su'e lau tama i le Hawai'i State Science (NGSS) Assessment, na'o le togi aupito sili ona maualuga e teuina mo ana fa'amaumauga aloa'ia.

E fia le umi o su'ega ta'itasi?

E tusa ma le lua itula e faia ai le Su'ega o le Saienisi a le Setete o Hawaii (NGSS). E tusa ma le 2 i le 3 1/2 itula e faia ai le Iloiloga mo le Smarter Balanced English Language Arts/Literacy. E tusa ma le 1 i le 2 itula le umi o le Smarter Balanced Mathematics Assessment. E ono tu'uina atu i lou alo se taimi fa'aopoopo e fa'auma ai iloiloga ta'itasi pe a mana'omia. E ono mafai e lou alo ona alu ese mai se su'ega ma toe fo'i atu i se isi aso e fa'auma ai. O le fa'asologa o le faiga o su'ega i luga o le initaneti e matauina fesili ua taliina e lou alo ma o le a tu'uina atu fesili o lo'o totoe pe a toe fa'aauau e lou alo se su'ega.

O a tomai o komepiuta e mana'omia e la'u tama mo su'ega?

O su'ega e aofia ai fesili e mana'omia ai le filifili e lau tama o se tali se tasi mai se seti o tali, tusi ata ma fa'agaoioi ni mea, ma ta tonu i lalo a latou tali i totonu o le faiga o su'ega. E mafai ona fa'aaogā e lau tama le mea o lo'o fa'agaoioi ai mea i luga o komepiuta po'o ki o le komepiuta po'o mea uma e lua e su'e ai su'ega i luga o le initaneti, 'ae lē mana'omia le avea ma poto fa'apitoa i le fa'aaogāina o le komepiuta pe iloa ta le komepiuta.

E mafai fo'i ona filifili tamaiti a'oga pe fa'aaogā nisi o mea faigaluega o lo'o maua i luga o le initaneti e fesoasoani ia i latou i le taimi o su'ega. E mafai e tamaiti ona:

- fa'alatalata ia iloa lelei upu ma ata;
- fa'ailoa fa'amatalaga tāua;
- vase ese tali sesē; ma
- maka fesili mo le toe iloiloina.

Matou te 'u'una'ia tamaiti ina ia fa'ata'ita'i le taliina o itua'iga fesili e aofia i totonu o su'ega. E maua fa'ata'ita'iga o vaega o fa'atinoga ma su'ega mo a'oa'oga mo vasega ta'itasi po'o le fusi mo tausaga o vasega ma o lo'o maua su'ega i le alohahsap.org.

O afea e maua ai e a'iga fa'ai'uga o su'ega?

O le a maua e lou a'iga se ripoti tusitusia o togi fa'ai'u o lau tama i le amataga o le isi tausaga fa'alea'oa'oga i le vaitaimi o le masina o Setema.

E fa'apefea ona ou fesoasoani i la'u tama e sauni mo su'ega?

E sili ona mafai ona e fesoasoani i lau tama e ala i le tu'uina atu pea o lau lagolago e fesoasoani i lau tama ina ia lelei lana taumafai i le a'oga i aso uma. Ia mautinoa e lava le moe a lau tama, 'ai sana mea'ai lelei i le taeao, fa'auma ana meaa'oga e fai i le fale, ma alu i le a'oga i aso uma. O le Smarter Balanced Assessments ma le Hawai'i State Science (NGSS) Assessments e fuaina le tulaga lelei o le fa'amalieina e lau tama o aiaiga e tele o vaega o fa'atinoga lea e fesoasoani e ta'ita'ia le faia o fa'atonuga i aso uma a lau tama a'o fa'agasolo le tausaga fa'alea'oa'oga.

E mafai fo'i ona e fesoasoani i lau tama ina ia masani i itua'iga fesili e ono fai atu iai e tali mai e ala i le lua iloiloina o lenei tusi ma asiasi i le alohahsap.org e tali ai ni fesili fa'aopoopo e tusa ai ma tali o fa'ata'ita'iga o vaega o fa'atinoga ma su'ega mo a'oa'oga.

O a ni lagolago mo le mauaina o lo'o iai mo la'u tama?

O iloiloga e ofoina atu mea e mafai ona filifili mai ai i le mauaina e fesoasoani i tamaitia'oga **uma**, e aofia ai tagata a'oa'oina o le gagana Peretania ma i latou e iai mana'oga fa'apitoa, e fa'aali mea ua latou iloa ma e mafai ona faia i su'ega a le setete. O lagolago mo le mauaina e pei o le fa'a'ese'ese o mea e faia ai, fe'au tusitusia-i-le-tautala, ma gagana mo e tauaso, e mafai ona fesoasoani ina ia maua e tamaitia'oga fesili o su'ega ma tali e ono filifili mai ai. Mo nisi fa'amatalaga mo ni mea e filifili mai ai e tusa ai ma le mauaina, asiasi i le alohahsap.org ma alu i le vaega mo Mea mo Fa'atinoga.

Fesili Fa'ata'ita'i mo le Smarter Balanced Assessments ma le Hawai'i State Science (NGSS) Assessments

E tatau i tamaiti ona tali itua'iga fesili eseese mo su'ega e faia i luga o le initaneti:

- Fesili e iai tali e filifili mai ai, lea e filifili e tamaiti le tali sa'o mai se seti o tali e ono iai
- Fesili e fausia o latou tali:
  - Fesili o le gagana fa'anatura, lea o le a taina ai e tamaiti a latou tali pupu'u ma u'umi i totonu o avanoa mo tali
  - Fesili fetalia'i, lea e fa'aaogā ai e tamaiti le mea e fa'agaoioi ai mea i luga o komepiuta po'o ki o le komepiuta e fa'aminoi ai mea pe tusi ni tali i totonu o se avanoa mo tali (lea e fa'aaigoaina o le pusa felavasa'i)
  - Fesili e fua i ni faiga fa'amatematika, lea e taina ai i totonu e tamaiti so'o se fa'aaliga tau matematika po'o se faiga o ni numera
  - Fa'amanatu fa'akomepiuta, lea e feso'ota'i ai tamaiti ma fa'amaumauga ma tu'uina mai tali i faiga esese

E tatau foi ona tali e tamaiti aoga ituaiga fesili e pei o le a ta'ua I lalo, I luga o le Su'ega EOC e faia I luga o le initaneti mo le Paiolo 1 (NGSS):

- Fuifui o mea faitino, ua faia faapitoa ia auai ai le tamaitiiti aoga I se faatinoga 'anoa faasaienisi e fetaui ma lana vasega, e o gatasi ma se faamoemoega tau faatinoga a le NGSS. E amata le fuifui o mea faitino taitasi I se mea mataina moni e mafai ona tupu I le lalolagi ae sosoo ai ma faamaumauga talafeagai, ma e aofia ai fesootaiga e lua pe sili atu e manaomia ai le faatino e tamaiti aoga o le faatinoina o le mafai ona latou faaaogaina le saienisi ma faatinoga faainisinia, manatu autu mo le faatonutonuina, ma mafaufauga fesootai o loo faamatalaina e le faamoemoega tau faatinoga.
- Mea faitino tutoatasi, lea e fesootai ai tamaiti aoga ma se mea mataina moni e mafai ona tupu I le lalolagi ae mulimuli mai ai, I le tele o taimi, se fesootaiga se tasi e faavaa e fua I luga o se manaoga mo se galuega se tasi.

O fesili o loo mulimuli mai o loo faaata mai ai ituaiga fesili o le a taliina e lau tama I luga o le Su'ega o le EO a le Setete o Hawaii E tasi pe lua fesili o le a faaalia mo su'ega o mataupu taitasi. A talafeagai, e aofia foi I fesili taitasi le tali sa'o ma isi faamatalaga mo le togiina.

Afai e te mana'o e te silasila ini fesili fa'aopoopo, fa'amolemole asiasi i le alohahsap.org.

Vasega 3

Mata'upu: Matematika Smarter Balanced

Hawai'i Common Core Standard: 3.MD.3: 1 | MD | H-3 | a/s | 3.MD.3: Tusi se kalafi ata ua uma ona fuaina ma se kalafi pa ua uma ona fuaina e momoli mai ai se seti o fa'amaumauga e iai ni ona fa'avasegaga eseese. Fo'ia fa'afitauli sitepu tasi ma le lua o le "toe fia nisi mea e sili atu" ma le "toe fia nisi mea e la'itiiti ifo" e fa'aaogā ai fa'amatalaga o lo'o tu'uina mai i kalafi pa ua uma ona fuaina. Fai ma fa'ata'ita'iga, tusi se kalafi pa lea e momoli mai e sikuea ta'itasi o le kalafi pa ni fagafau se 5.

MA

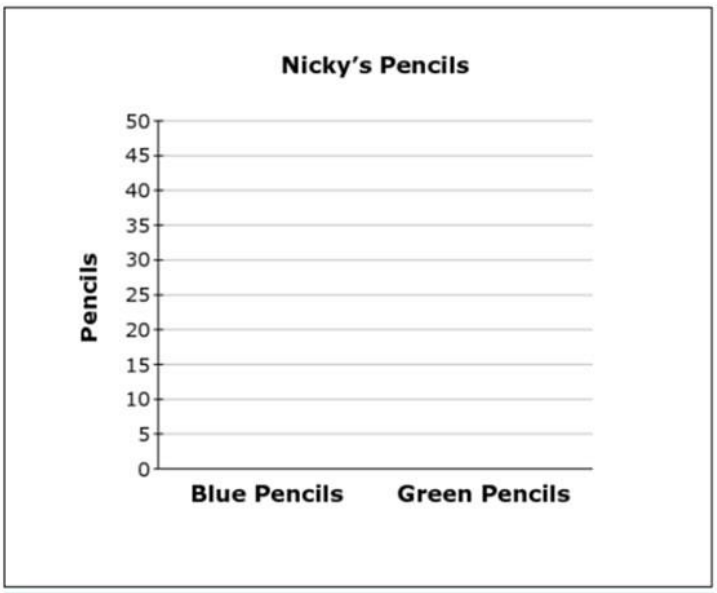
3.OA.8: 1 | OA | D-3 | m | 3.OA.8: Fo'ia fa'afitauli upu e lua sitepu e fa'aaogā ai faiga e fa. Momoli mai nei fa'afitauli e fa'aaogā ai faiga fa'amatematika ae avea se mata'itusi e fai ma sui o le aofa'iga e le'i iloa. Fua le talafeagai o tali e fa'aaogā ai lou mafaufau ma faiga o matematega e aofia ai le fai e avea ma se numera atoa.

Itua'iga Fesili: Tali na Fausia – Fetalia'i (Pusa Felavasa'i) (1 'ai)

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.

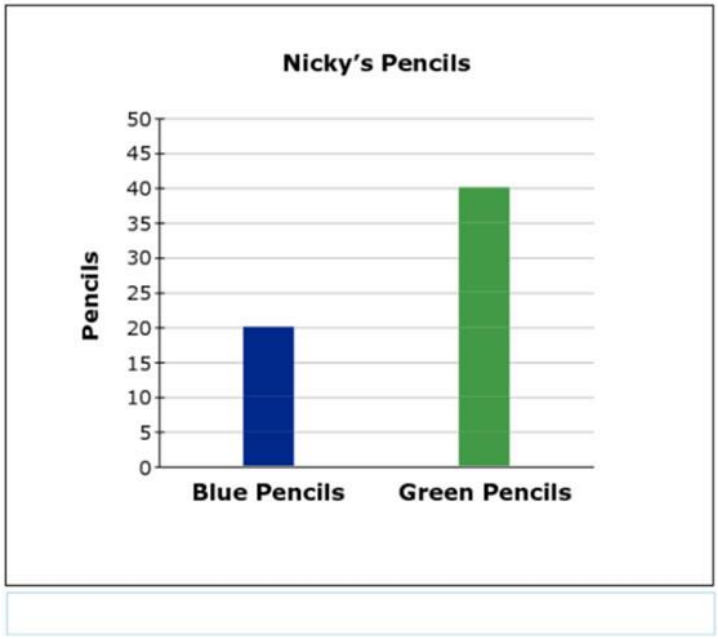


Ina ia maua se ai se tasi, e tatau i se tamaitiiti ona fau se kalafi pa e fa'aalia ai e 20 penitala lanu moana a Nicky ma penitala lanu meamata e 40.

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.



Vasega 5

Mata'upu: Hawai`i Saienisi (NGSS)

Aiaiga a Hawaii mo le Saienisi mo le Isi Augatupulaga: Faaaoga ata faataitai e faamatala ai le malosiaga I totonu o meaai a manu (faaaoga mo le toe fonofonoina o le tino, tuputupua'e, gaioioi, ma ia faatumau le mafanafana o le tino) na avea muamua ma malosiaga mai le la. (5 PS3-1)

Ituaiga Fesili: Mea Faitino Tutoatasi (3 togi)

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

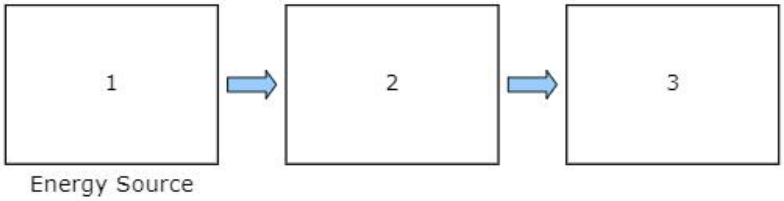


Table 1. Energy Flow Model Order

	Sun	Water	Marmot	Grass and Seeds
Picture				
Location	▾	▾	▾	▾

Togiina:

E maua e le tamaitiiti aoga le togi e 1 mo tali sa'o e pei ona ta'ua I lalo:

- E faailoa mai e le tamaitiiti aoga e muamua mai le la nai lo le mutia I luga o le ata faata'ita'i.
- E faailoa mai e le tamaitiiti aoga e muamua mai le mutia I le mamoti I luga o le ata faata'ita'i.
- E le'i faaaogaina e le tamaitiiti aoga le vai I le ata faata'ita'i.

O le tali sa'o e foliga faapea:

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

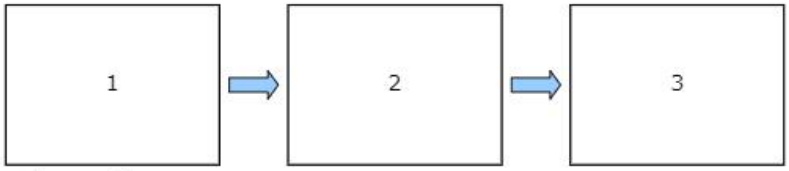


Table 1. Energy Flow Model Order

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

Vasega 5

Mata'upu: Hawai`i Saienisi (NGSS)

Aiaiga a Hawaii mo le Saienisi mo le Isi Augatupulaga: Fai se faamatalaga e tusa ai ma le tulaga 'anoa o se tali mo se mamanu e faaitiitia ai le aafiaga o se faalavelave e fesoota'i ma le tau. (3 ESS3-1)

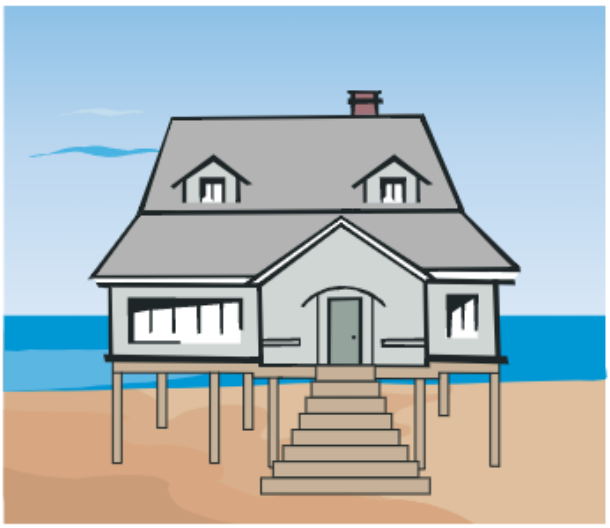
Ituaiga Fesili: Fuifui o Mea Faitino (9 togi)

Tulaga Faatupu Tali:

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.

Fesootaiga:

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	☐	☐
Water damage to floors	☐	☐
Water damage to household objects	☐	☐
Yard flooding	☐	☐

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 [▾].

Togiina:

E maua e le tamaitiiti aoga le togi e 1 I le Vaega A mo tali nei:

- E filifili e le tamaitiiti aoga le "Puipuia mai" mo "Mea faitino I le fale ua tafea". "Faaleagaina o fola o le fale ona o le vai", ma "Faaleagaina o mea totino I le fale e le vai".
  MA
- E filifili e le tamaitiiti aoga le "E le puipuia mai" mo le "Ologa o le lotoa".

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	☑	☐
Water damage to floors	☑	☐
Water damage to household objects	☑	☐
Yard flooding	☐	☑

E maua e le tamaitiiti aoga togi e 3 mo le filifilia o tali nei e tolu I le Vaega B:

- "tetee atu I tafega malolosi o le vai"
- "mafai ona tatalia le mamafa o le fale"
- "maualuga e mafai ona le lolovaia ai le fale"

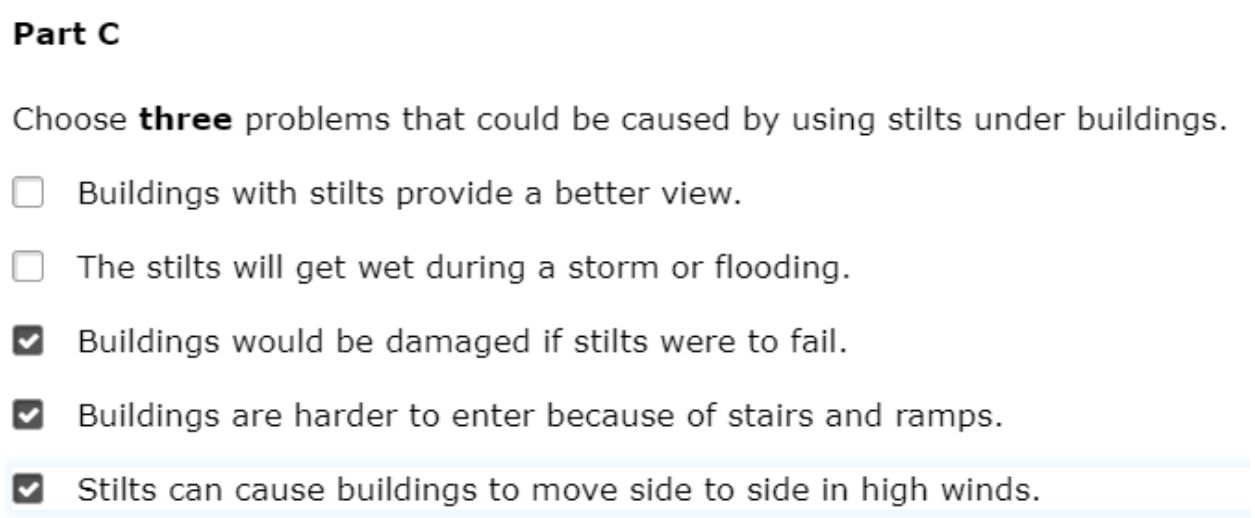
Part B

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

E maua e le tamaitiiti aoga togi e 3 mo le filifilia o tali nei I le Vaega C:

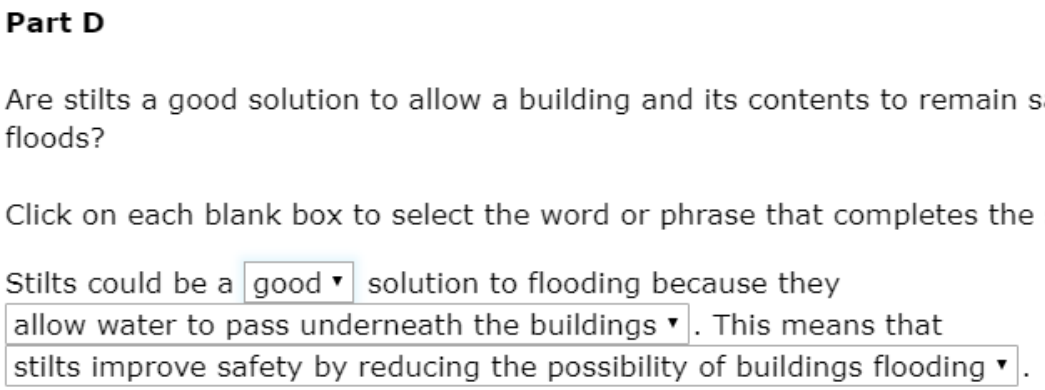
- "E faaleagaina fale pe a pauu I lalo pou o loo faamaualuluga ai."
- "E faigata atu ona ulufale I se fale ona o fasitepu ma auala faapitoa mo nofoa faataavalevale."
- "O pou e faamaualuluga ai e mafua ai ona feminoia'I fale mai lea pito I lea pito I le taimi o matagi malolosi."



E maua togi e 2 o le tamaitiiti aoga I le Vaega D pe a filifilia tali nei I luga o tali e pauu mai lalo:

- E filifili e le tamaitiiti aoga le "lelei" I luga o le tali muamua e pa'u mai lalo ma "mafai e le vai ona tafe I lalo o le fale" I luga o le tali lona lua e pa'u mai lalo. POO le filifilia e le tamaitiiti aoga o le "leaga" I luga o le tali muamua e pa'u mai lalo ma le "e faaleagaina ai fale pe a pau'u" poo le "taugata" i luga o le tali lona lua e pa'u mai lalo" (1 togi)
- E filifili e le tamaitiiti aoga se tali I luga o le tali lona tolu e pa'u mai lalo e fetaui ma le fuaiupu e fausia I luga o tali muamua e lua na pau'u mai lalo. (1 togi)
    - Mo le "taugata", na filifili e le tamaitiiti aoga le "na sili atu ona faaalu I se isi mea le tupe na faaalu I pou e faamaualuga ai"
    - Mo le "o le a faaleagaina ai fale pe a pau'u", e filifili e le tamaitiiti aoga le "e fou nisi faalavelave e ono tulai mai ona o pou e faamaualuga ai"
    - Mo le "mafai e le vai ona tafe I lalo o le fale", e filifili e le tamaitiiti aoga le "e faaleleia e pou e faamaualuga ai le tulaga saogalemu e ala I le faaitiitia o le lolovaia o fale".

Faataitaiga o tali e maua atoa le togi I le Vaega D:



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 [bad ▾] solution to flooding because they
[will damage the buildings if they fail ▾]. This means that
[stilts create new hazards ▾].

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 [bad ▾] solution to flooding because they
[cost a lot ▾]. This means that
[the money spent on stilts could be better spent elsewhere ▾].

Vasega 5

Mata'upu: Fa'atufugaga o le Gagana Peretania e Poto Atu Paleni

Hawai'i Common Core Standard: 2-3: 4-CR | 2-3: FA'AUIGA & TU'UFA'ATASI FA'AMATALAGA: Su'e fa'amatalaga e lagolagoina ai manatu autū ma mata'upu lagolago; filifili ma tu'ufa'atasi fa'amatalaga mai fa'apogai tusitusia o fa'amatalaga po'o lomiga ma mea e le'o lolomiina.

Itu'aiga Fesili: Tali filifilia – Mea fetaui i totonu o le pusa (1 togi).

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.	☐	☐	☐
Note 2: Some tree frogs change color to hide in what is around them.	☐	☐	☐
Note 3: Tree frogs dig a hole in the ground to stay warm when it is cold outside.	☐	☐	☐
Note 4: It takes weeks for baby tree frogs to jump because, at first, they have no legs.	☐	☐	☐

Ina ia maua se togi se tasi, e tatau i le tamaitiiti a'oga ona o'omi le pusa o lo'o fa'ailoa mai ai Fa'amatalaga 1 o lo'o lagolagoina le Manatu Autū B, Fa'amatalaga 2 o lo'o lagolagoina Manatu Autū C, Fa'amatalaga 3 o lo'o lagolagoina Manatu Autū B, ma le Fa'amatalaga 4 o lo'o lagolagoina Manatu Autū 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.	☐	☑	☐
Note 2: Some tree frogs change color to hide in what is around them.	☐	☐	☑
Note 3: Tree frogs dig a hole in the ground to stay warm when it is cold outside.	☐	☑	☐
Note 4: It takes weeks for baby tree frogs to jump because, at first, they have no legs.	☑	☐	☐

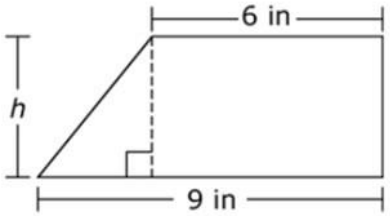
Vasega 6

Mata'upu: Matematika Smarter Balanced

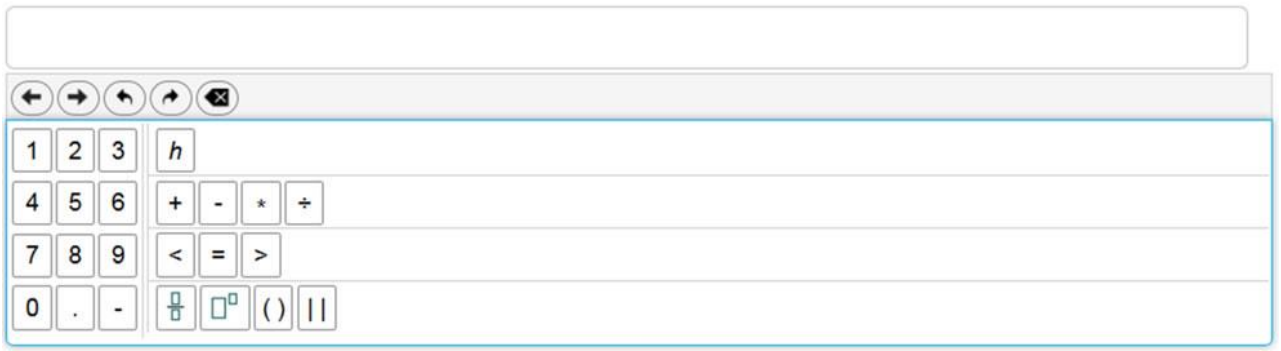
Hawai'i Common Core Standard: H-6: 1 | G | H-6: Fo'ia ni fa'afitauli moni o lo'o tutupu tau matematika e aofia ai le vaega, vaega o le fola, ma le telē.

Itua'iga Fesili: Tali na Fau – Fa'atonu o Faiga Fa'amatematika (1 'ai).

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

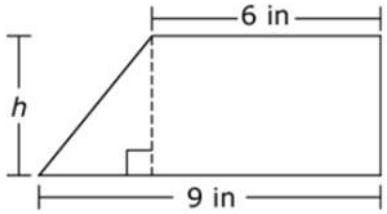


Use the Equation Tool to create an expression that could be used to determine the area of the trapezoid.



Ina ia maua se 'ai se tasi, e tatau i le tamaitiiti ona ta i totonu le faiga fa'amatematika (pe se mea e tali tutusa ma) $\frac{1}{2}$ (3 x h) + (h x 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.

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

Vasega 7

Mata'upu: Fa'atufugaga o le Gagana Peretania e Poto Atu Paleni

Hawai'i Common Core Standard: 3-6: 2-W | 3-6: TUSI/TOE ILOILO FA'AMATALAGA PUPU'U: Fa'aaogā ni faiga 'ese'ese pe a tusi pe toe iloilo se parakalafa e tasi pe sili atu o fa'amatalaga: fa'avasega manatu e ala i le ta'u mai ma fa'atumau se fa'atāua/leo, atia'e se autū e aofia ai mea/upu talafeagai e lagolagoina ai po'o se fa'amalamalamaga atili, pe o le tu'uina mai o se fa'ai'uga e talafeagai ma le 'auga ma e o lo'o ave iai.

Itua'iga Fesili: Tali faufau – Tali fa'a'umi'umi (2 togi).

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.

Ina ia maua ni togi se lua, e tatau i le tamaitiiti a'oga ona tu'uina mai ni manatu/mafua'aga/fa'amatalaga au'ili'ili fa'asolosolo lelei ma talafeagai ma/po'o mea e fa'amaonia ma lagolago ai manatu/su'esu'ega fa'alea'oa'oga/ manatu autū e tusa ai ma le tagata moni o lo'o i tua atu o le tala fa'afagogo ia Johnny Appleseed ina ia saga fa'amanino ai fa'atinoga ma fa'alautele ai manatu i se auala aogā lelei e fa'aaogā ai upu/gagana tonu.

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.

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- 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

Vasega 8

Mata'upu: Hawai`i Saienisi (NGSS)

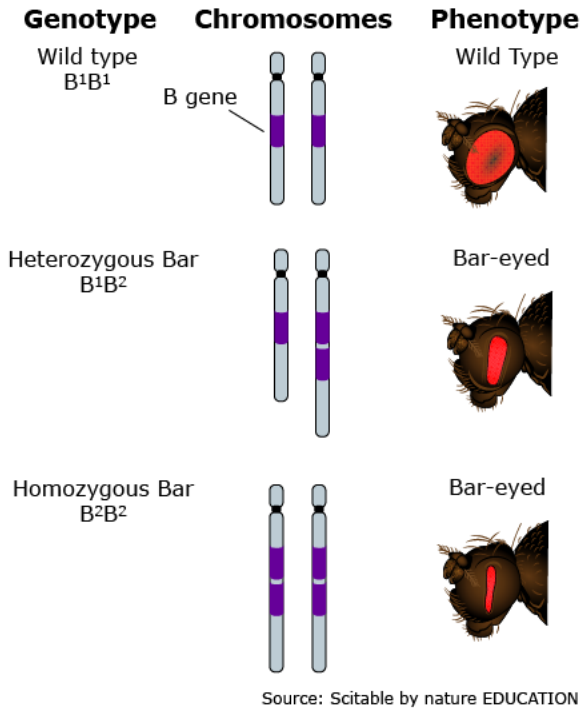
Aiaiga a Hawaii mo le Saienisi mo le Isi Augatupulaga: Atiae ma faaaoga ata faata'ita'I e faamatala ai pe aisea e ono aafia ai porotini ona o suiga I le fausaga o sela (suiga e avea o se isi mea) o loo I koromosome, ma ono oo atu I se tulaga le lelei, lelei, pe leai ni aafiaga I le fausaga ma le aoga o le meaola. (MS-LS3-1)

Ituaiga Fesili: Mea Faitino Tutoatasi (2 togi)

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.

Figure 1. Genotypes and Phenotypes of Three Flies



Source: Scitable by nature EDUCATION

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	
2	
3	
4	The eyesight of a fly is reduced.

E maua e le tamaitiiti aoga le togi e 1 mo tali taitasi nei:

- E filifili e le tamaitiiti aoga le "o le koromosome A e sili atu ma le tasi le kopi o le sela B o loo iai" I se laasaga muamua I le "E iai se suiga I le gaosiga o porotini". (1 togi)
- E filifili e le tamaitiiti le "Ua iai le suiga I le gaosiga o porotini" I le laasaga na muamua atu I le "Ua puiti le fausaga o le mata o le lago". (1 togi)

E maua e le tamaitiiti aoga le togi e 1 mo tali taitasi nei:

O foliga nei o se tali sa'o:

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.

Vasega 8

Mata'upu: Hawai`i Saienisi (NGSS)

Aiaiga a Hawaii mo le Saienisi mo le Isi Augatupulaga: Fau, faaaoga, ma tuuina mai finauga e lagolago ai le faamatalaga e faapea a suia le malosi o le gaoioi a se mea faitino, e aveesea mai le malosi mai lena mea faitino ma auina ese atu. (MS-PS3-5)

Ituaiga Fesili: Fuifui o Mea Faitino (9 togi)

Tulaga Faatupu Tali:

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.

Animation 1. Braking Train

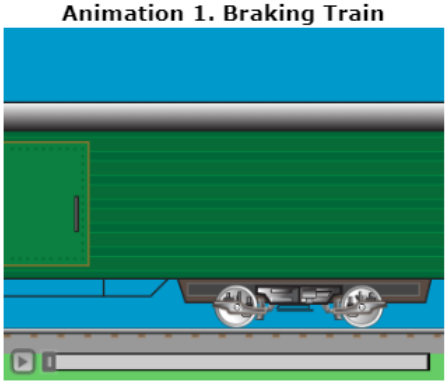


Table 1 explains some properties of the train and its surroundings as energy flows throughout the system.

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.

Fesootaiga:

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?

Ⓐ The surroundings gain energy.

Ⓑ The surroundings lose energy.

Ⓒ The surroundings do not gain or lose energy.

Ⓓ 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.

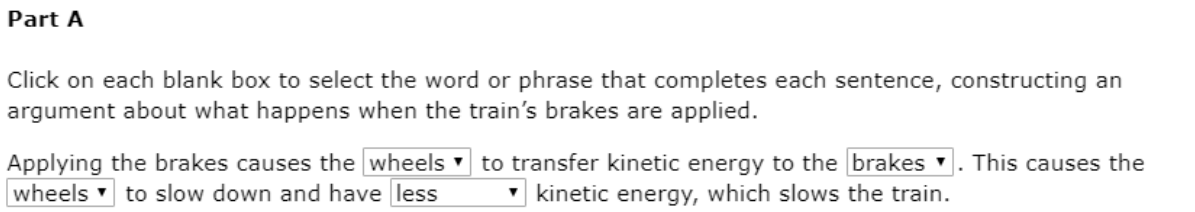
☐ The sparks that fly off the wheels give off light.

☐ The potential energy of the train increases as it slows.

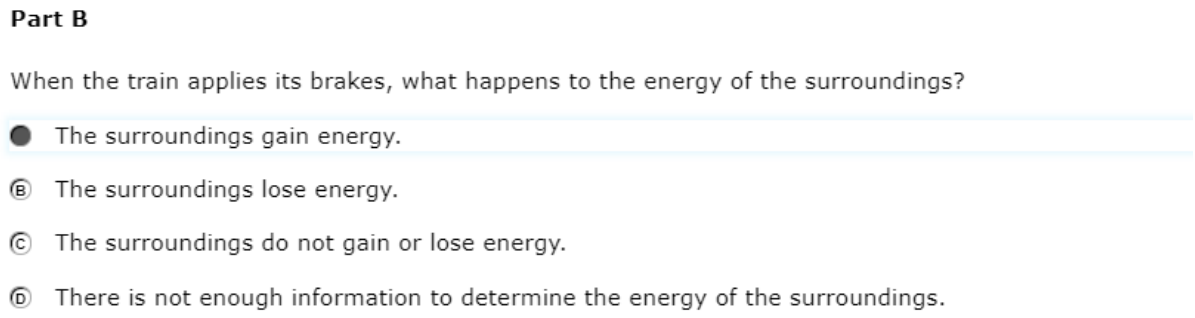
Togiina:

E 2 togi e maua e le tamaitiiti aoga I le Vaega A mo mea nei:

- E filifili e le tamaitiiti aoga le "uili" I le avanoa muamua ma le "taofi" poo "u'amea pipi'I" I le avanoa lona lua. (1 togi)
- E filifili e le tamaitiiti aoga le "uili" I le avanoa lona tolu ma le "laitiiti ifo" I le avanoa lona fa. (1 togi)

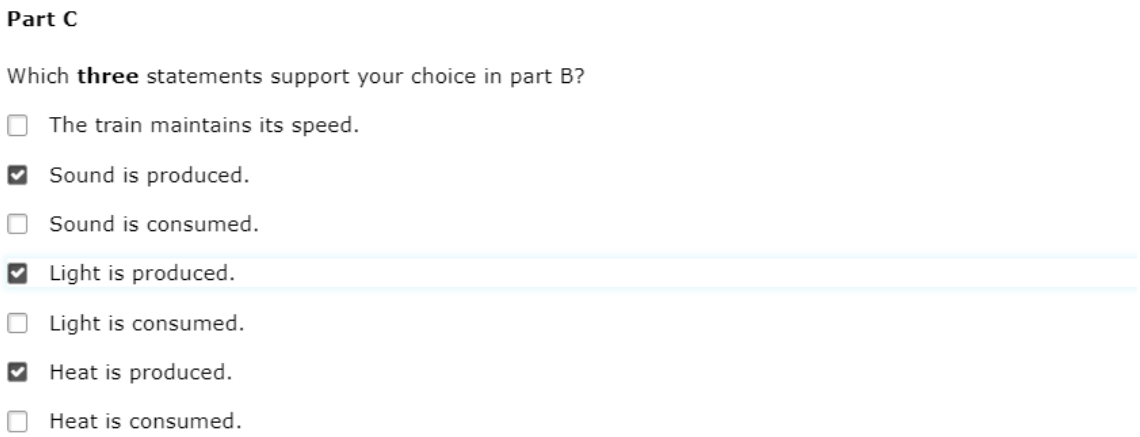


E maua e le tamaitiiti aoga le togi e 1 I le Vaega B mo le filifilia o le "Ua faaopoopo le malosi o le siosiomaga"



E maua e le tamaitiiti aoga togi e 3 I le Vaega C mo le filifilia o mea nei:

- "Gaosia le leo"
- "Gaosia le malamalama"
- "Gaosia le vevela"
-



E maua e le tamaitiiti aoga togi e 3 I le Vaega D mo le filifilia o mea nei:

- “O taofi e maua mai ai le vevela ona o le malosi'aga o loo iai”
- “E l'i taofi”
- “O 'aloi afi e felelei mai uili e maua ai le malamalama.”

Part D

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

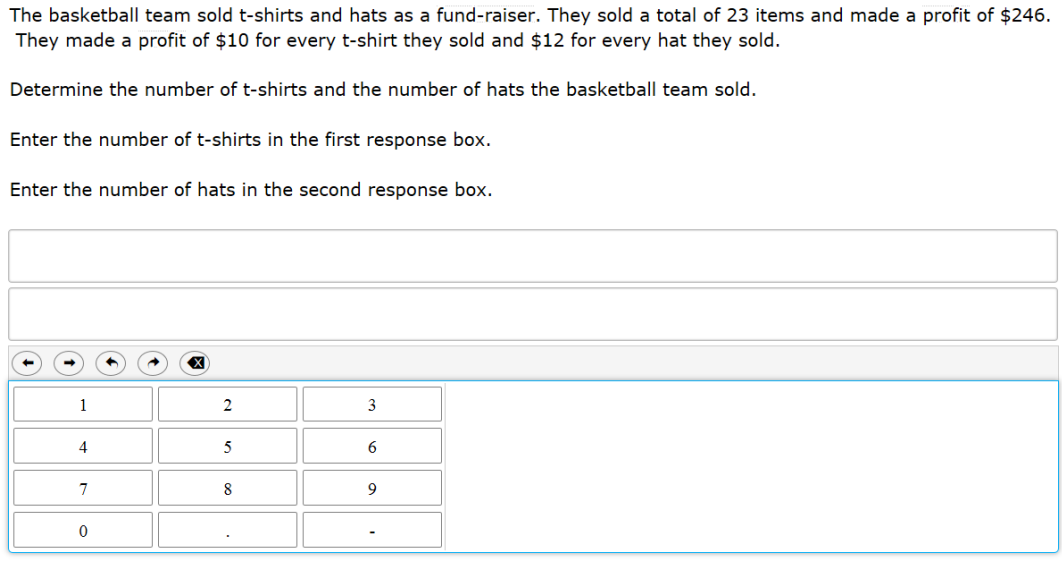
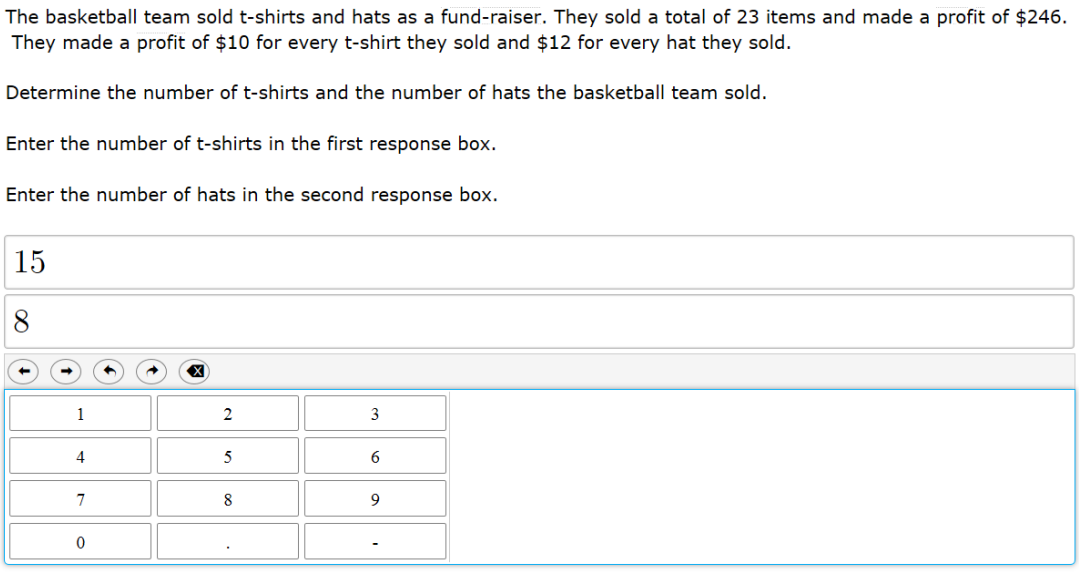
- [x] The brakes give off energy as heat.
- [x] The brakes make a screeching sound.
- [ ] The brakes undergo a chemical reaction.
- [x] The sparks that fly off the wheels give off light.
- [ ] The potential energy of the train increases as it slows.

Vasega 11

Mata'upu: Matematika e Poto Atu Paleni

Hawai'i Common Core Standard: A-REI.C: Su'e mai le fa'agasologa o le faiga o le sa'iliga o se tali o se mata'upu.

Itua'iga Fesili: Tali na Fausia - Tali na maua mai I le faiga o le sa'iliga o se tali o se mata'upu (1 togi).



Ina ia maua se togi se tasi, e tatau ona ta I totonu e le tamaitiiti a'oga le 15 mo le aofa'i o mitiafu na fa'atau atu I totonu o le pusa o tali muamua, ma le numera 8 mo le aofa'i o pulou I totonu o le pusa o tali lona lua.