

June 2020

maxi

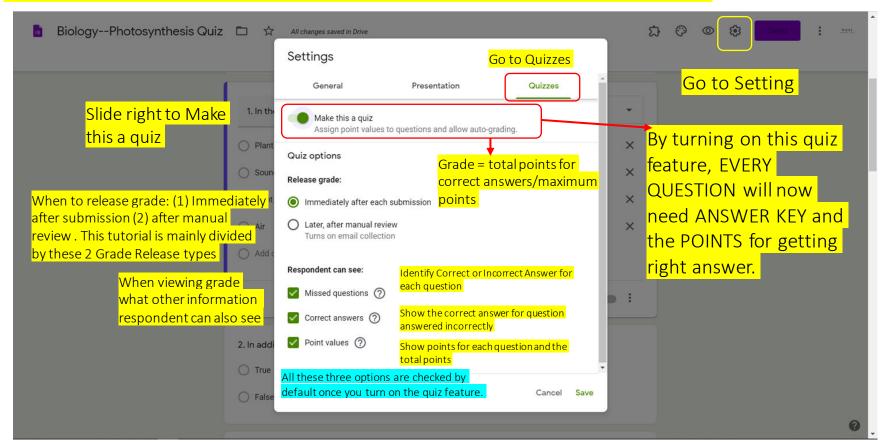
## Google Forms to Create Online Quiz/Test

- In Part 1 of this Google Forms tutorial, we learn how to develop questionnaire, study parts of questionnaire, create titles, descriptions, selecting type of question to use, questionnaire setting etc.
  - In form/questionnaire setting there is a feature that enables Google Form as Quiz/Test tool, that is point/scoring feature for each question based on its answer and the total score for each form/questionnaire.
- In this part 2 of Google Forms tutorial we will learn how to create online quiz/test using Google Forms. The same case with Part 1 to Create Online Survey:
  - We expect that most will use quiz/test on their smartphone
  - However for quiz/test development and Grading, Laptop/PC is preferred.
    - Grade for each quiz/test participant is also linked to spreadsheet.
- Google Forms is Free.
- This tutorial is developed by <u>adhi.wikantyoso@maxiresearch.com</u> from <u>www.maxiresearch.com</u>

### Making a Quiz

- To develop quiz we need to focus on completing the questions part of the quiz first (including correct-incorrect option answers)
- Only after it is finished then we move on to the point feature, making it a quiz

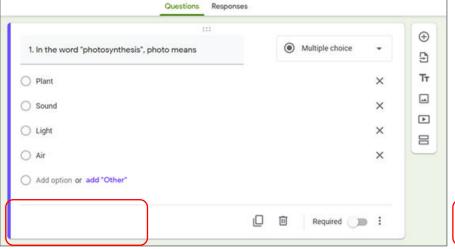
After your questions for quiz is completed (questions = question + answer choices)



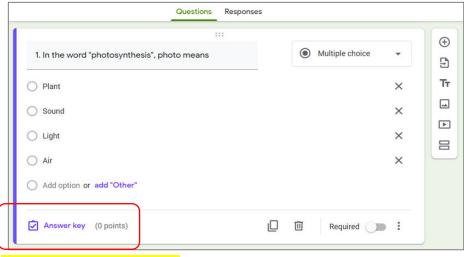
### Turning On Quiz Feature

 By turning on the quiz feature every question now needs information on Answer Key, which/what answer is correct and the points for getting right answer.

#### Quiz Feature Turn Off



Quiz Feature Turn On



No Answer Key menu

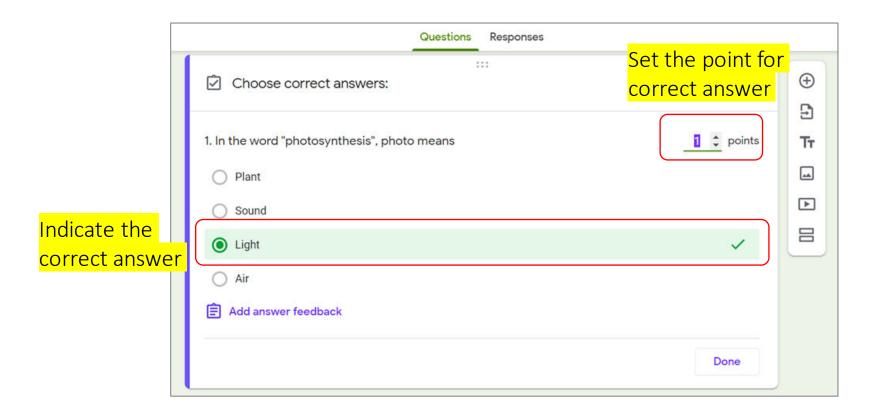
With Answer Key menu

Each question now needs info on Answer Key.

If we don't provide info on Answer key, the default point is 0

# After Clicking Answer Key in a Question

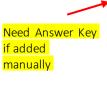
 Two things that we need to do: (1) Indicate our correct answer and (2) Set points for correct answer.

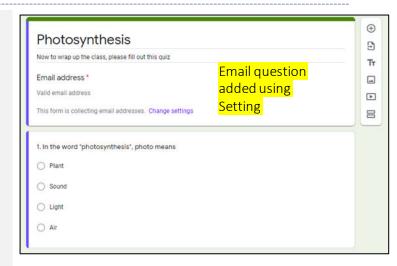


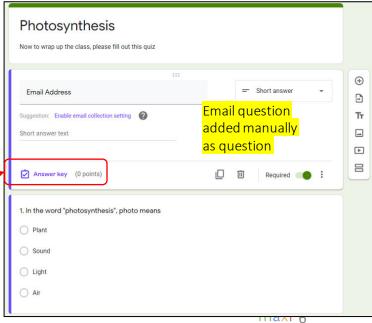
#### Email as Quiz Id and Address to Send Grade Release

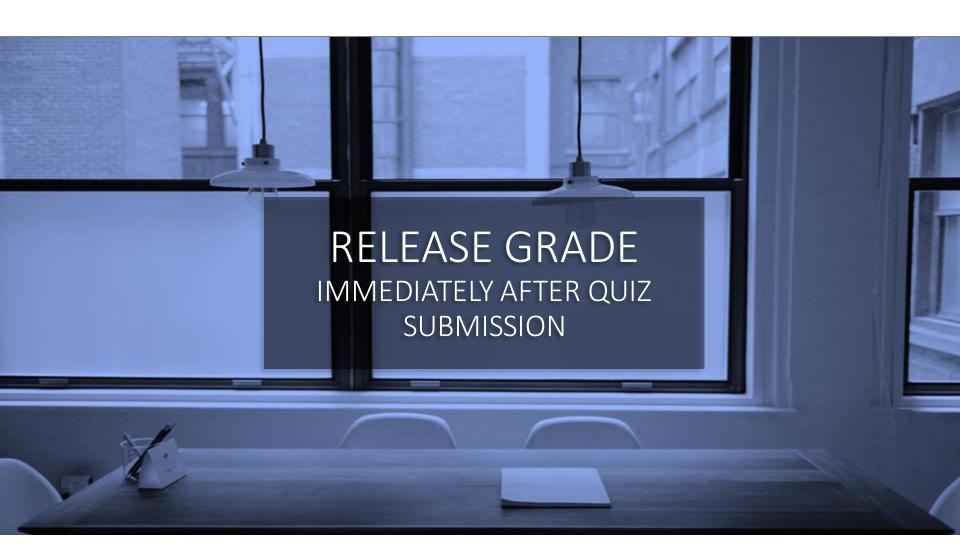
- If Quiz with Grading after review is selected, email question is automatically added.
  - Email is used as Quiz Id and as address to send to for Grade Release.
- If Grade Release immediately after submission is selected, email is optional. However generally advisable to add just in case later on we need to email Grade Release for various reasons (for Grade score confirmation, revised/edit Grade etc)
- Add email question using Google Forms default in Setting.
  - The add email using setting doesn't count as question in quiz therefore no need for Answer Key





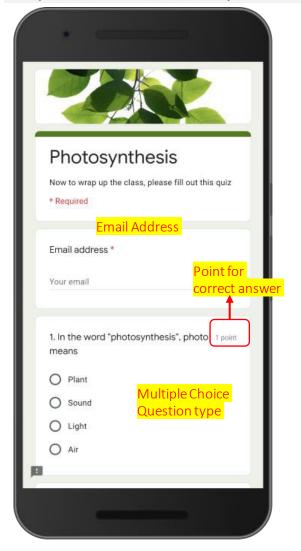


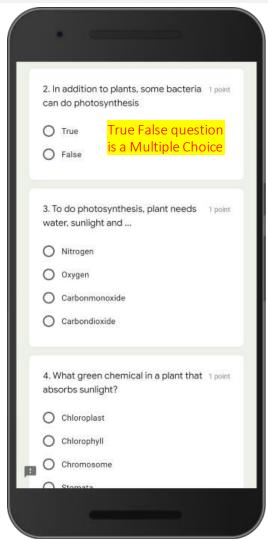


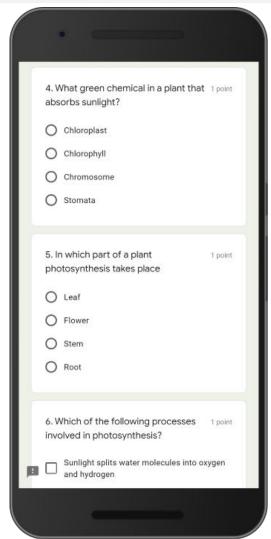


# Quiz Example for Grade Release Immediately (1)

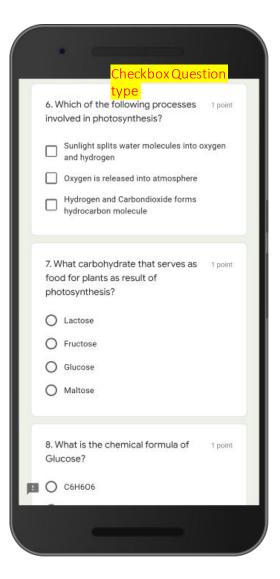
• If grade release immediately after submission is selected, it is much better to have quiz which question type only consists of Multiple Choice or Checkboxes type, as there is no need to review point answer manually.

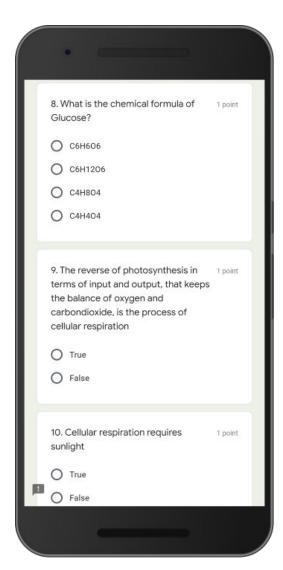


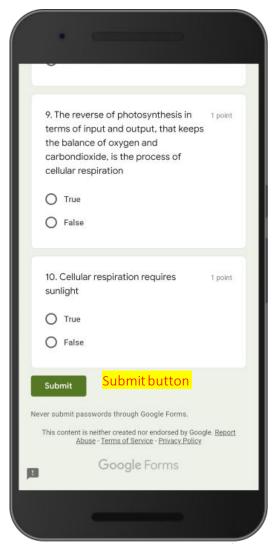




# Quiz Example for Grade Release Immediately (2)

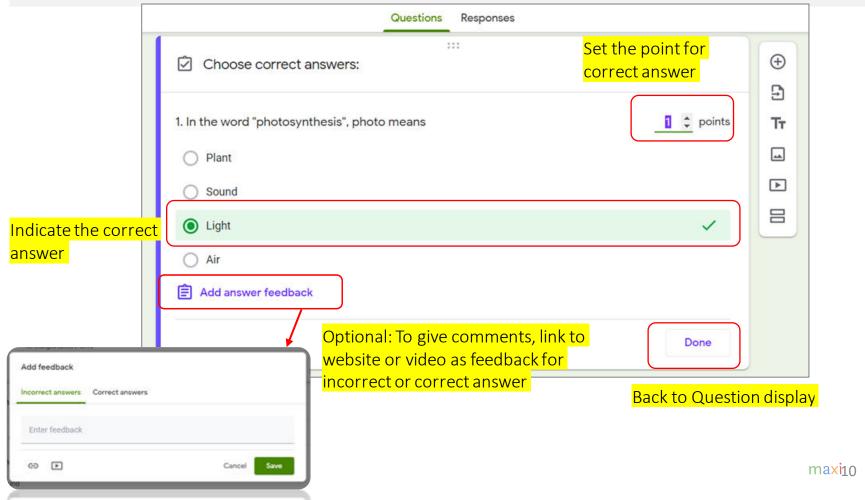






# Set Answer Key: Multiple Choice (1)

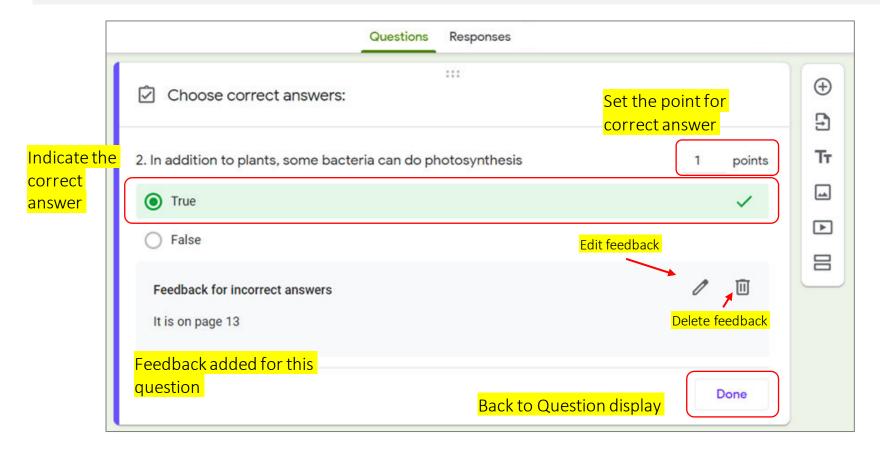
- Multiple Choice question is among the most common question type for quiz. In Multiple Choice we choose one correct answer from several option answers
- After a question is completed with its options answers (commonly 4 but can be any number of options), indicate the correct answer and set the point for correct answer for the question.



# Set Answer Key: Multiple Choice (2)

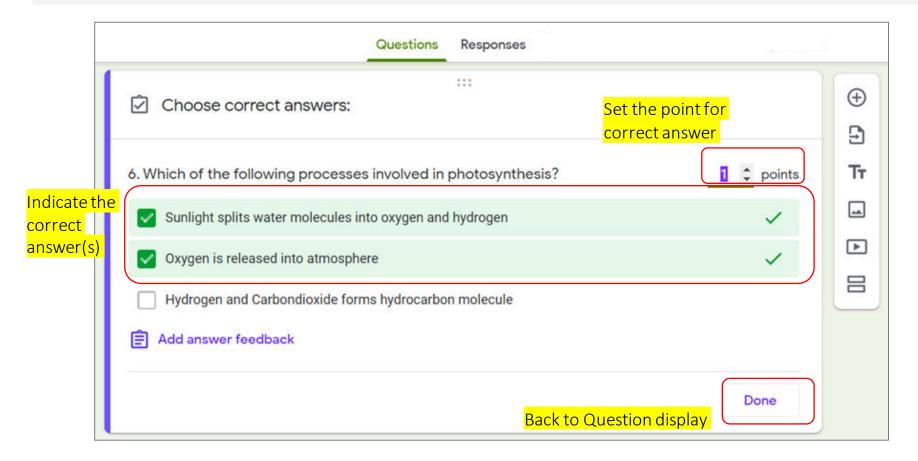
#### True – False Question

- Another common question type for quiz is True False. It is actually a Multiple choice with only 2 option answers, True and False
- After question is completed with its True-False answers indicate the correct answer and set the point for correct answer for the question.

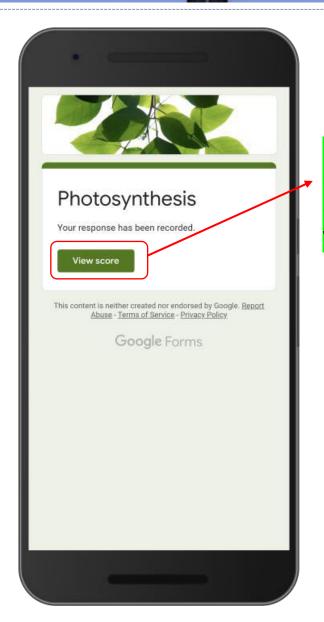


# Set Answer Key: Checkboxes

- Not as frequent is Checkboxes question, this question type can have one or more than one correct answers from several option answers.
- Respondent will get point when their choices are exactly like key answers. Partly correct answer doesn't count.



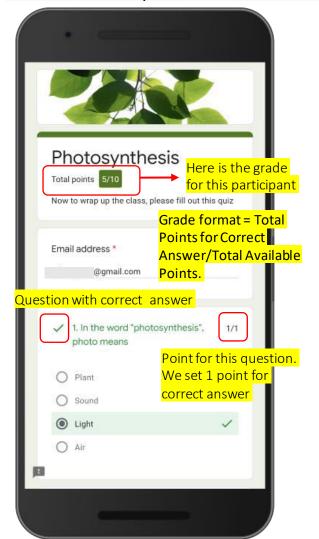
# Confirmation Page After Submit for Quiz with Grade Release Immediately, For Grade Release Immediately, There is Button to View Score

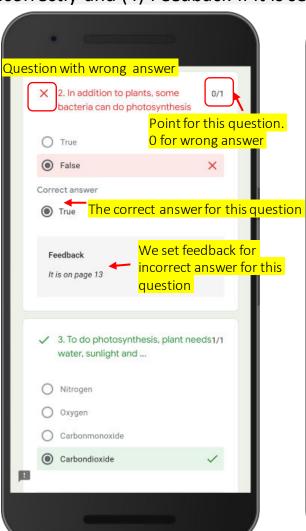


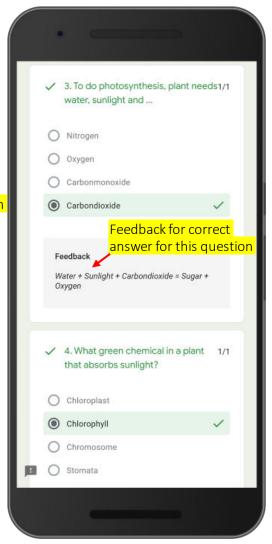
For completed quiz, right after quiz is submitted you will have Confirmation Page with **button to View Score** 

### Grade Release Page (1)

Right after hitting View Score button you will have the following Grade Release page. The
content include (1) Point for each question and Grade result (2) Correct/Incorrect identification –
checked and in green for correct answer, cross and in red for incorrect answer (3) Show correct
answer for question answered incorrectly and (4) Feedback if it is set so

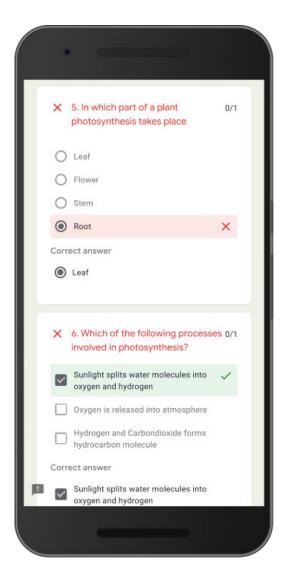


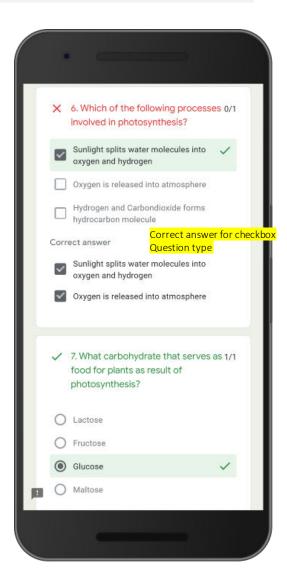


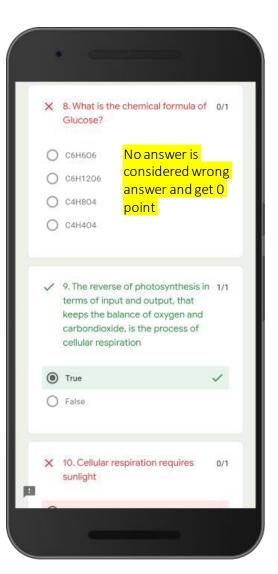


# Grade Release Page (2)

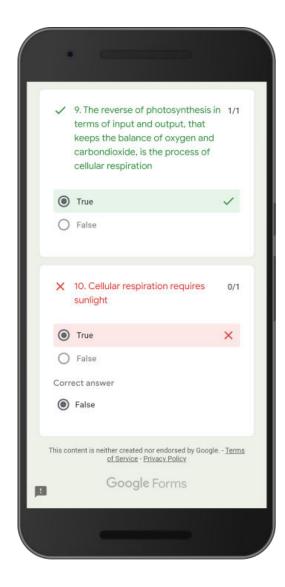
No answer is considered incorrect answer and get 0 point







# Grade Release Page (3)

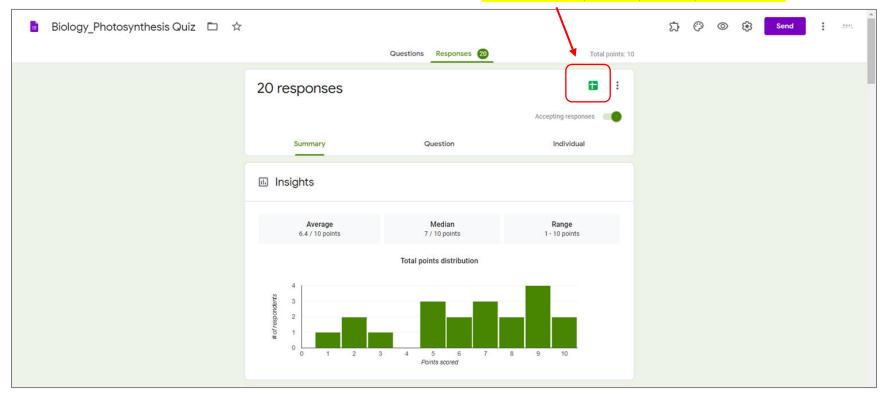


• End of the Grade Release page

# Open Responses in Spreadsheet

Go to Responses tab and click spreadsheet button

#### Click this to open response spreadsheet



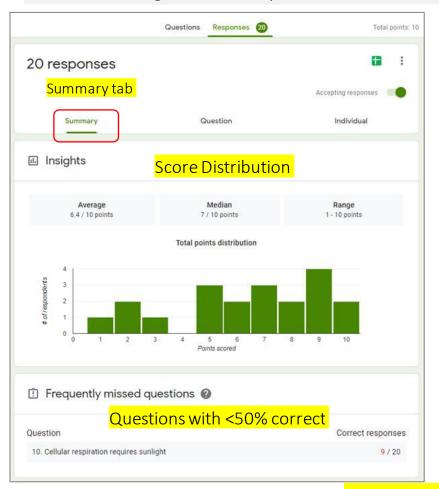
### Response Spreadsheet

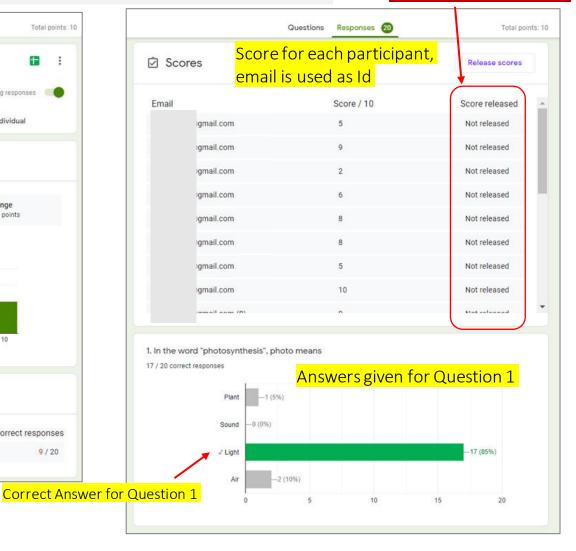
Record of answer for each question for every respondent is available in spreadsheet format.
 Two additional information in the spreadsheet: Timestamp, when quiz/test is submitted and Total Scores/Grades

If quiz feature is turned on, column containing quiz scores/grades will automatically be added Biology Photosynthesis Quiz (Responses) 🌣 🗈 🝰 Share File Edit View Insert Format Data Tools Form Add-ons All changes saved in Drive These terms often used interchangeably Score = Grade = Total Points Timestamp Timestamp 1. In the word "photosynth 2. In addition to plants, so 3. To do photosynthesis, £ 4. What green chemical ir 5. In which part of a plant 6. Which of the following £7. What carbohydrate that 8. What is the chemical **Email Address** Score 5/11/2020 9:48:43 @gmail.com 5/10 FALSE Carbondioxide Chlorophyl Root Sunlight splits water mole Glucose 5/11/2020 9:53:45 9/10 TRUE Oxygen Leaf Sunlight splits water mole Glucose C6H12O6 @gmail.com Chlorophyll 4 5/11/2020 9:54:26 @amail.com 2/10 Light FALSE Oxygen Chromosome Stem Oxygen is released into a Fructose C6H6O6 TRUE Sunlight splits water mole Glucose 5/11/2020 9:55:08 @gmail.com 6/10 Light Carbondioxide Chromosome Leaf C6H6O6 5/11/2020 9:55:39 8/10 Light FALSE Carbondioxide Chlorophyll Leaf Sunlight splits water mole Glucose C6H12O6 @gmail.com 5/11/2020 9:56:23 8/10 FALSE Carbondioxide Chlorophyll Leaf Sunlight splits water mole Glucose C4H8O4 @gmail.com Light 8 5/11/2020 9:57:10 @gmail.com 5/10 Plant TRUE Oxygen Chromosome Leaf Sunlight splits water mole Glucose C6H12O6 9 5/11/2020 9:57:36 @gmail.com 10 / 10 Light TRUE Carbondioxide Chlorophyll Leaf Sunlight splits water mole Glucose C6H12O6 10 5/11/2020 9:58:10 @gmail.com 9/10 Light FALSE Carbondioxide Chlorophyll Leaf Sunlight splits water mole Glucose C6H12O6 11 2/10 FALSE Leaf C6H6O6 5/11/2020 9:58:40 @gmail.com Oxygen Chromosome Sunlight splits water mole Lactose 12 5/11/2020 9:59:12 9/10 Light FALSE Carbondioxide Chlorophyll Leaf Sunlight splits water mole Glucose C6H12O6 @gmail.com 13 9/10 TRUE Carbondioxide Chlorophyll Leaf C6H12O6 5/11/2020 9:59:54 @gmail.com Light Sunlight splits water mole Glucose 14 5/11/2020 10:00:24 @gmail.com 7/10 Light TRUE Carbondioxide Chlorophyll Leaf Sunlight splits water mole Glucose C6H6O6 15 5/11/2020 10:01:12 @gmail.com 1/10 FALSE Oxygen Chromosome Flower Sunlight splits water mole Lactose C6H6O6 16 5/11/2020 10:02:14 7/10 Light TRUE Carbonmonoxide Chromosome Leaf Sunlight splits water mole Glucose C4H8O4 @gmail.com 17 5/10 FALSE C6H6O6 5/11/2020 10:02:52 @gmail.com Light Carbondioxide Chlorophyll Root Hydrogen and Carbondio: Glucose 18 5/11/2020 10:03:49 3/10 Light FALSE Carbondioxide Chloroplast Stem Sunlight splits water mole Fructose C6H12O6 @gmail.com 19 5/11/2020 10:04:30 @gmail.com 10/10 Light TRUE Carbondioxide Chlorophyl Leaf Sunlight splits water mole Glucose C6H12O6 20 5/11/2020 10:05:01 @gmail.com 6/10 Light TRUE Carbonmonoxide Chlorophyl Stem Sunlight splits water mole Glucose C6H6O6 21 5/11/2020 10:05:36 @gmail.com 7/10 Light TRUE Chlorophyll Sunlight splits water mole Glucose C6H12O6 22 Each column contains answers for each question for every respondent <sup>2</sup>1st column has the time when each form (in this case Point for each question and feedback (if any) is not available in quiz/test) is submitted: date, spreadsheet. hour, minute, second. Form Responses 1 ▼

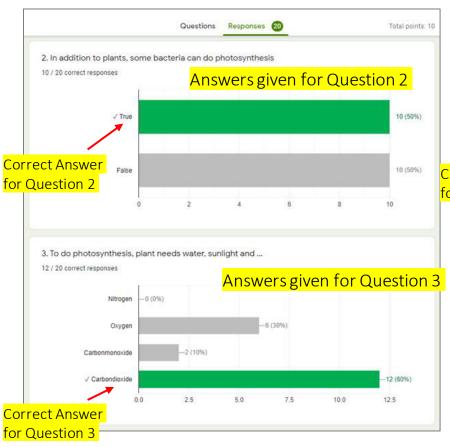
## Responses – Summary (1)

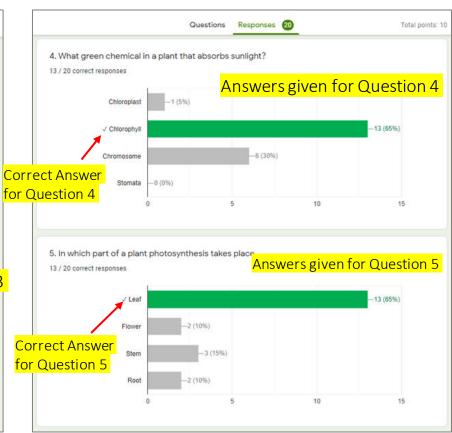
 In Responses – Summary there are Summary for the quiz: Score distribution profile, Frequently missed question, Scores for each participant and what answers are given for each question. Important: Not Released here means Release Grade by Email





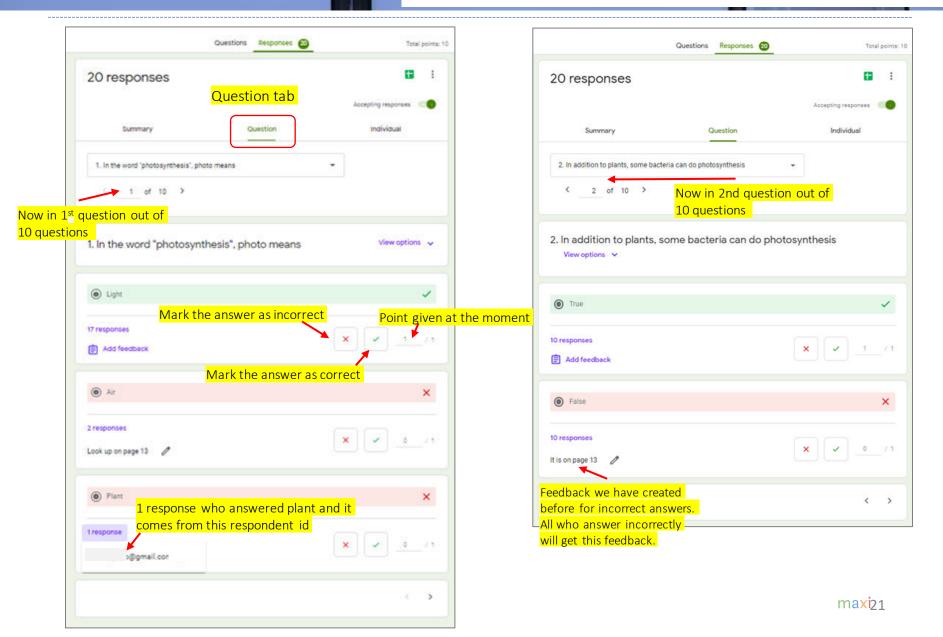
## Responses – Summary (2)





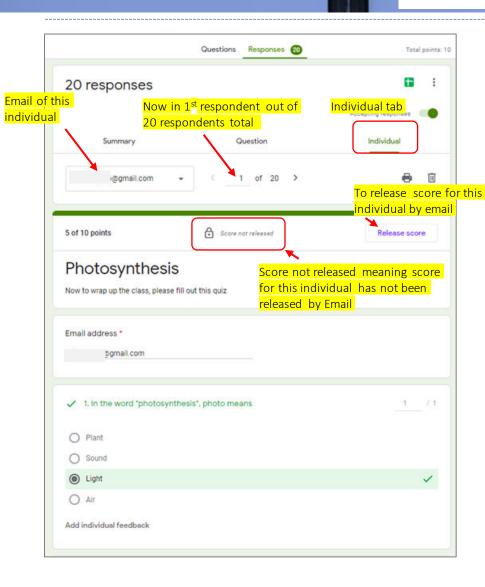
### Responses – Question

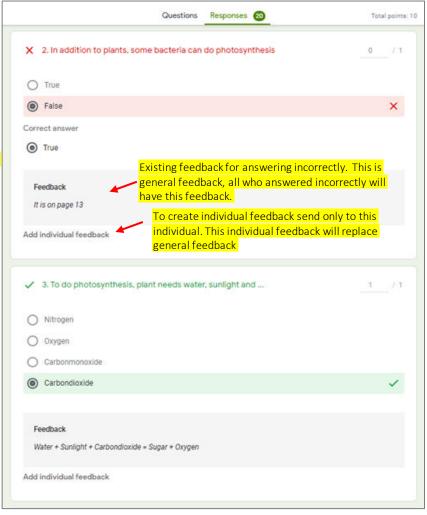
In Question tab we can explore on question basis who answered an option answer, mark as correct or incorrect particular answer and edit/revise its point, and add feedback



# Responses – Individual

In Individual tab we can explore on individual basis answer for each question, edit point and add feedback specifically for this individual





# Release Grade By Email: Although Quiz is using Grade Release Immediately, Later You Can Still Release Grades by Email

May 11 2:40 PM

May 11 2:40 PM

May 11 2:40 PM

@gmail.com

@gmail.com

@amail.com

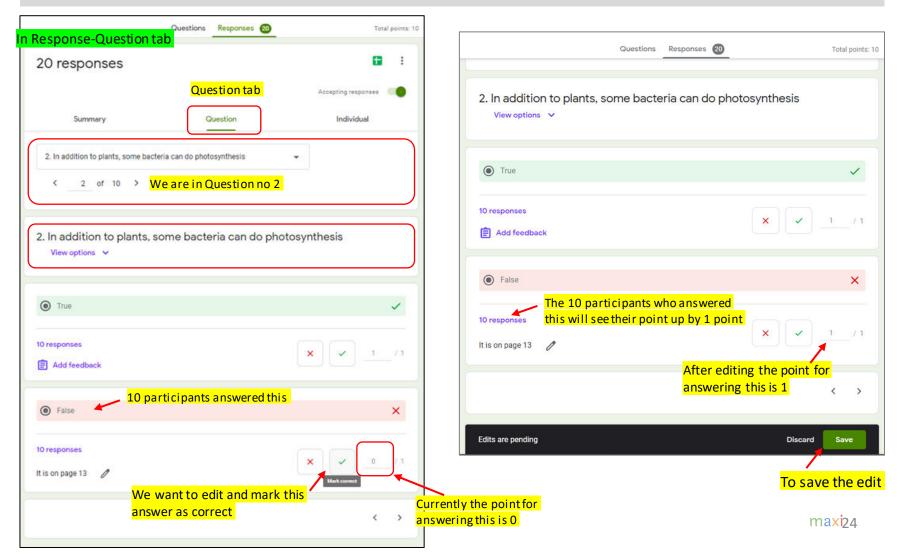
Now say we want to send email score as confirmatory from earlier Grade Release Immediately (via button View Score in Confirmation Page). Click this Release Score button in Response-Summary tab Message to say that this score is confirmation In Response-Summary tab stions Responses 20 Total points: 10 Quiz participants receive Release scores Scores Release scores score emails 2:42 PM ... 0.3KB/s 🖟 🗑 all all 🤝 218 Here is the email to confirm your test score Email Score / 10 Score released M @gmail.com Not released All Respondents All participants Score released: Not released @gmail.com 公 Photosynthesis > Inbox @gmail.com Not released  $\checkmark$ @gmail.com by default splitterbymaxirese... 2:40 PM @gmail.com Not released @gmail.com Not released @gmail.com @gmail.com @gmail.com @gmail.com Not released Time the email @gmail.com @gmail.com Not released score is received @gmail.com @gmail.com Not released @gmail.com Your score has been released for Photosynthesis @gmail.com Here is the email to confirm your test  $\checkmark$ @gmail.com Send emails and Time the email score is  $\checkmark$ Scores Release scores released Release scores @gmail.com Photosynthesis  $\checkmark$ @gmail.com Quiz/Test 5/10 Email Score / 10 Score released May 11 2:40 PM @gmail.com score SEND EMAILS AND RELEASE CANCEL May 11 2:40 PM @gmail.com May 11 2:40 PM @gmail.com Click view to open May 11 2:40 PM @gmail.com ← Reply ≪ Reply all → Forward **Grade Release** @gmail.com May 11 2:40 PM Page May 11 2:40 PM @gmail.com Now scores are

emailed to all

participants

### Editing Grade – By Question (1)

Now during review we may want to edit correct answer to certain question as incorrect, or conversely incorrect answer as correct



# Editing Grade – By Question (2)

After editing, the score for each affected quiz/test participants will be updated.

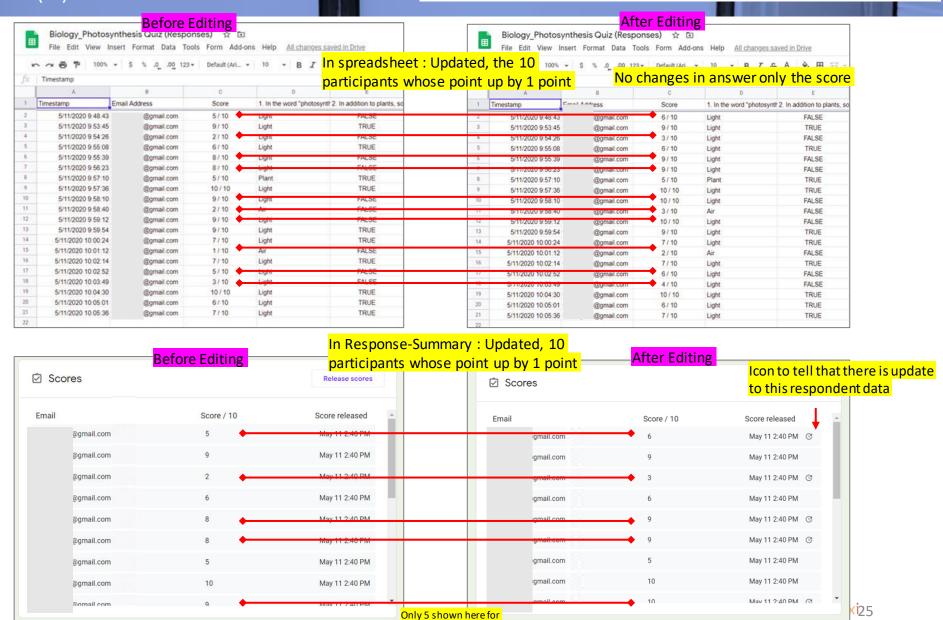


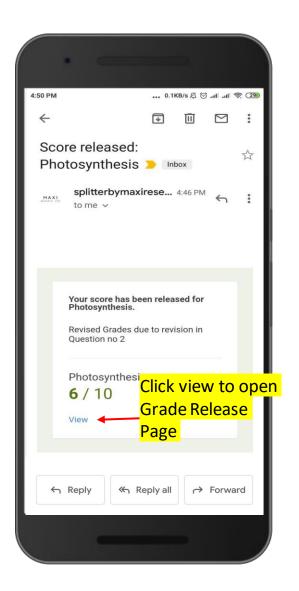
illustration purpose

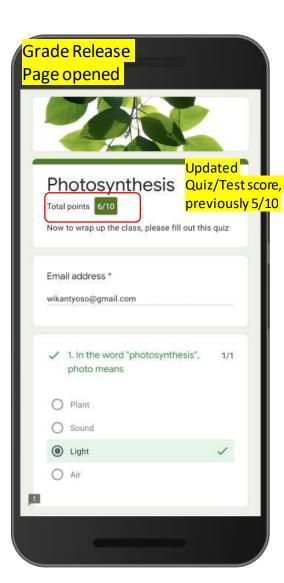
# More Release Grades by Email Release Grades can be Sent Multiple Times

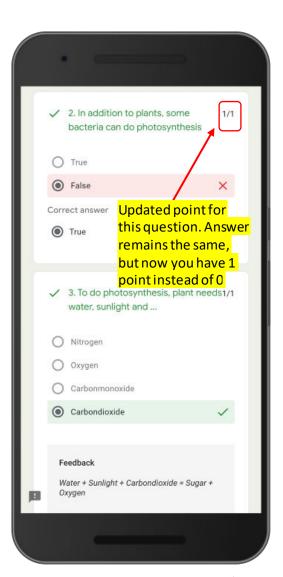
Now we want to release the updated grades, in this example only to affected participants only.



# Opening Grade Release Page Grade Release Page is Always Updated Following Edit/Revision

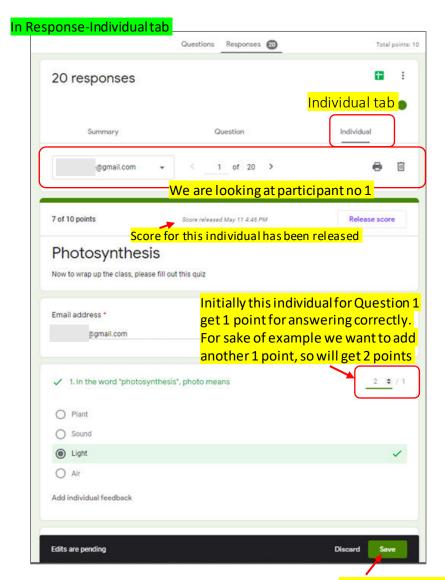


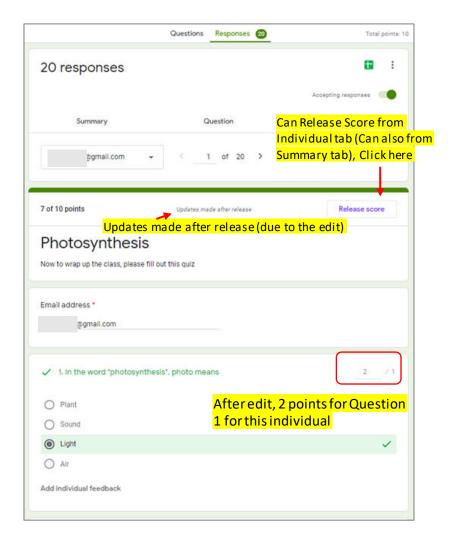




## Editing Grade – By Individual (1)

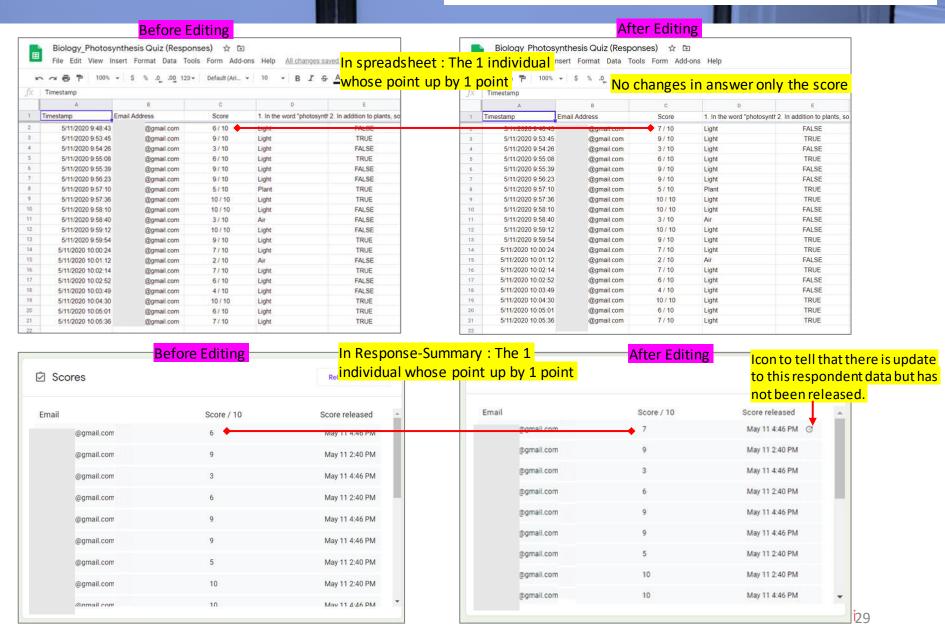
Now during further review we may want to edit point for certain individual, by adding point to a question.





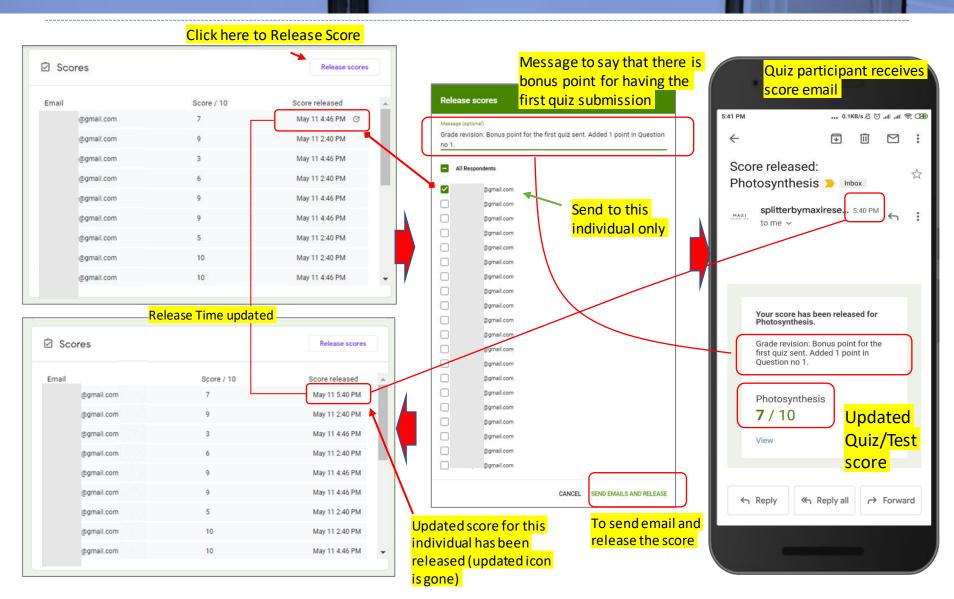
## Editing Grade – By Individual (2)

As also shown earlier, after editing the score for each affected quiz/test participants will be updated.

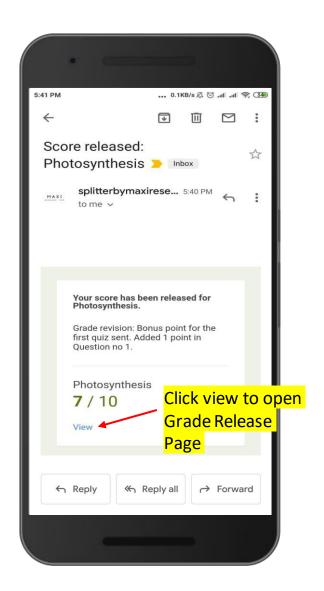


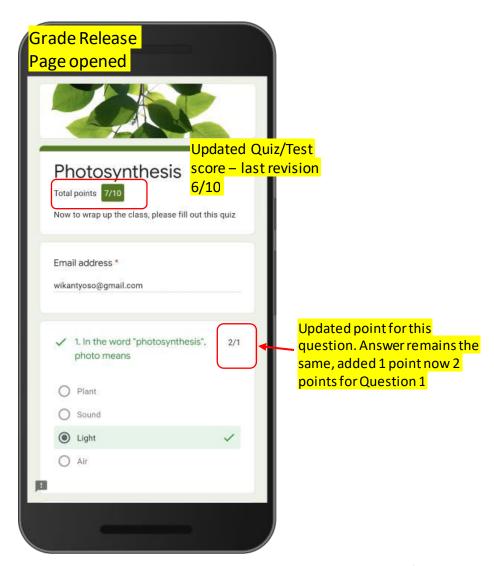
#### Another Release Grades by Email

No Limit on Number of Release Grades To Send



# Opening Grade Release Page Again Grade Release Page is Always Updated Following Edit/Revision





### sign next to Grade in Grade Response Page It means Final Score for the Quiz is Pending, Reason: Questions with Empty Points

- Remember that when a form is set as guiz, we need to SET (1) ANSWER KEY and (2) POINTS FOR CORRECT ANSWER for all guestions so that each guestion can produce a score based on its answer, correct or incorrect.
- Non quiz Questions (such as Quiz Participants profile data: Name, Address etc) naturally doesn't have Answer Key. In this case the point for these questions are actually empty, with the default score of 0 for Point Calculation.

Score for guiz for 1st participant, viewed using Grade Release Immediately (via "View Score" button in Confirmation Page)

> Photosynthesis Now to wrap up the class, please fill out this quiz

This form is collecting email addresses. Change settings

Valid email address

Short answer text

Answer key (0 points

questions have 0 point so it doesn't change total Score Photosynthesis Total points 10/10 (2) Now to wrap up the class, please fill out this quiz 0 Email address \* wikantyoso@gmail.com \_\_ Þ Name On the quiz, Add question on Name (and/or other profile questions) Year '

Total points Total points

2<sup>nd</sup> participant, viewed using Grade Release Immediately.

Same answers same score but now with? sign. Additional

When clicked it says Final Score Pending. Reason the additional question(s) with empty points.

Final score pending

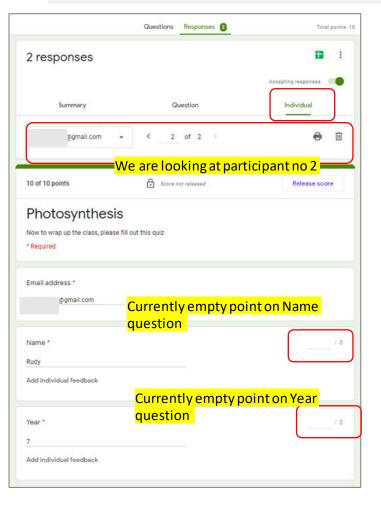
Photosynthesis Total points 10/10 Now to wrap up the class, please fill out this guiz Email address \* wikantyoso@gmail.com 1. In the word "photosynthesis", ( Light O Air

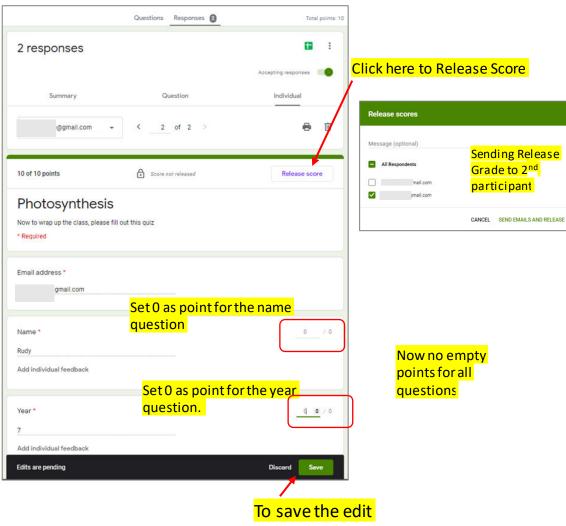
Answer Key not provided since there is no correct/incorrect name. Therefore empty score for this question, with default score of 0 for Grade/Point calculation.

Responses 1

## Set/Give Points for Questions With Empty Points

Go to Response - Individual tab

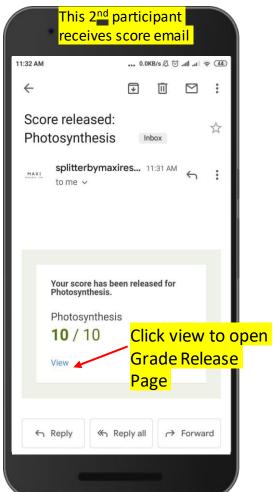


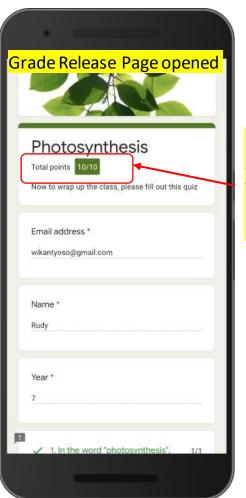


# Send Grade Release Email On the Grade Release Page now the sign is gone.



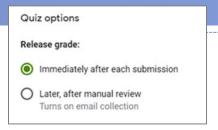








## Diagram Release Grade Immediately After Submit



#### Release Grade Immediately

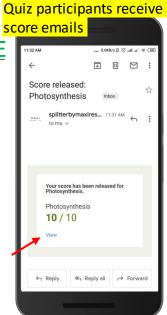
#### Can Send Release Grade Later (Optional)

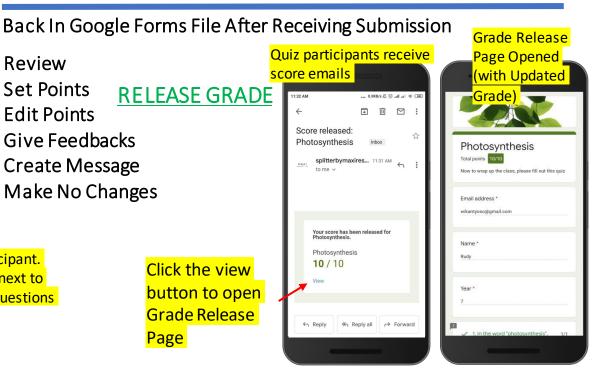
Photosynthesis Your response has been recorded. ent is neither created nor endorsed by Google. <u>Report</u>
<u>Abuse - Terms of Service - Privacy Policy</u> On Confirmation Page after Submit there is View Score button. Click to open Grade Release Page

Grade Release Page Opened Photosynthesis Total points 10/10 ② Now to wrap up the ss, please fill out this quiz Email address \* Grade for this participant. Can have symbol? next to Grade if there are questions with empty points

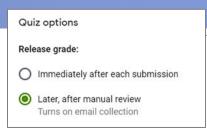
Review **Set Points RELEASE GRADE Edit Points** Give Feedbacks **Create Message** Make No Changes

> Click the view button to open Grade Release Page



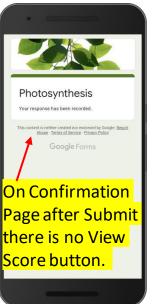


#### Now Diagram Release Grade Later After Manual Review



• The diagram below serves as an intro to next chapter on Release Grade Later After manual review. The difference with Release Immediately is down to no view button score on confirmation page after submit.

#### No Grade Release After Submit



After Submit Confirmation Page with No 'View Score' Button

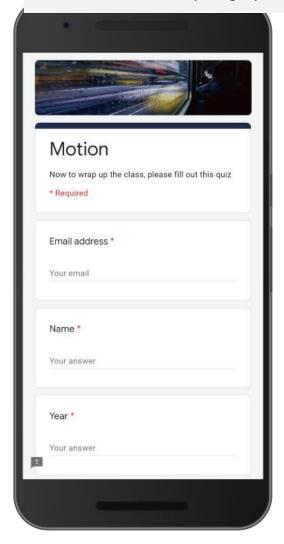
#### Release Grade Later After Manual Review

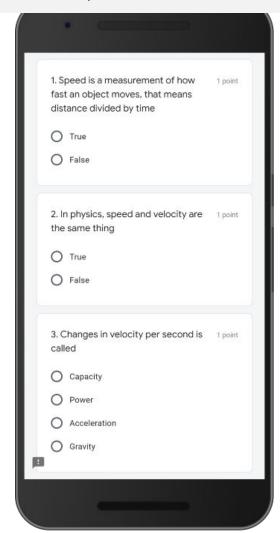
Back In Quiz File After Receiving Submission **Grade Release** Quiz participants receive Review Page Opened score emails **SEND EMAIL** Set Points ... 0.0KB/s 🖟 🗑 .all .al 👳 🖽 **Edit Points** Score released: Give Feedbacks A Photosynthesis Photosynthesis **Create Message** splitterbymaxires... 11:31 AM Now to wrap up the class, please fill out this quiz Email address wikantyoso@gmail.con Your score has been released for Photosynthesis 10 / 10 Click the view button to open **Grade Release Page** ≪ Reply all 
→ Forward

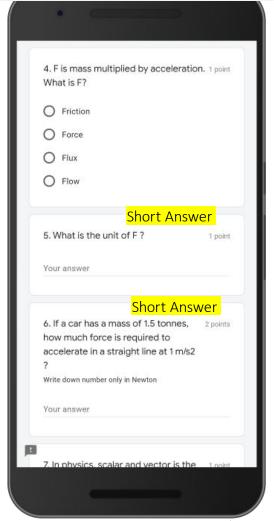


## Quiz Example for Grade Release Later After Manual Review (1)

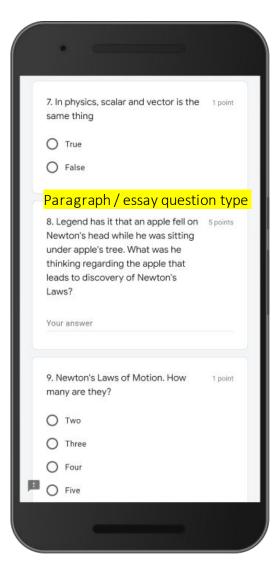
 The quiz below contains not only closed end but also open end. As you will see, for open end questions, short answer and paragraph type, eventually manual review is necessary to be able to give score properly

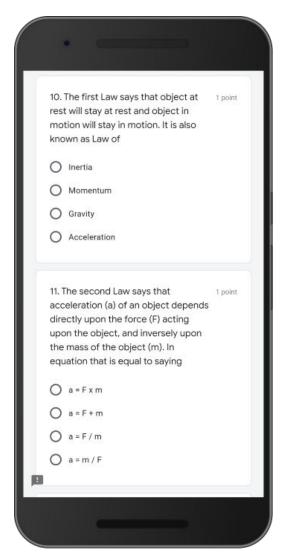


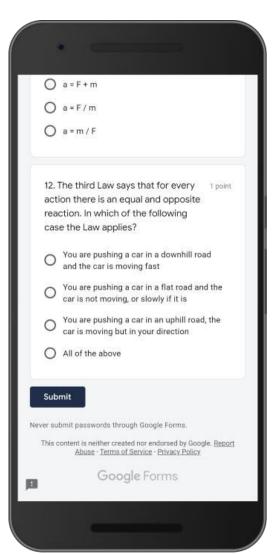




### Quiz Example for Grade Release Later After Manual Review (2)



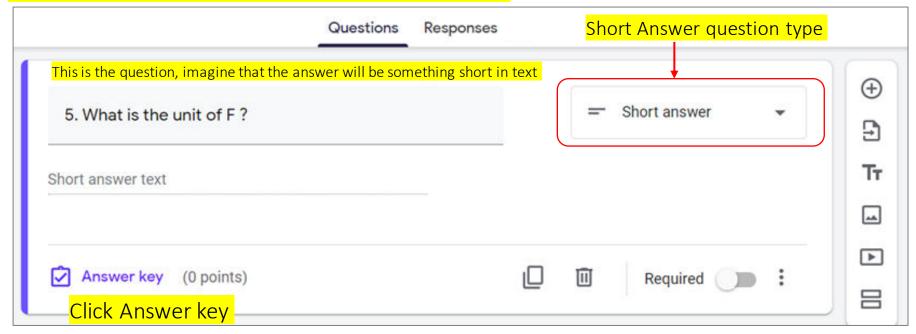




Expecting Text Answer (1)

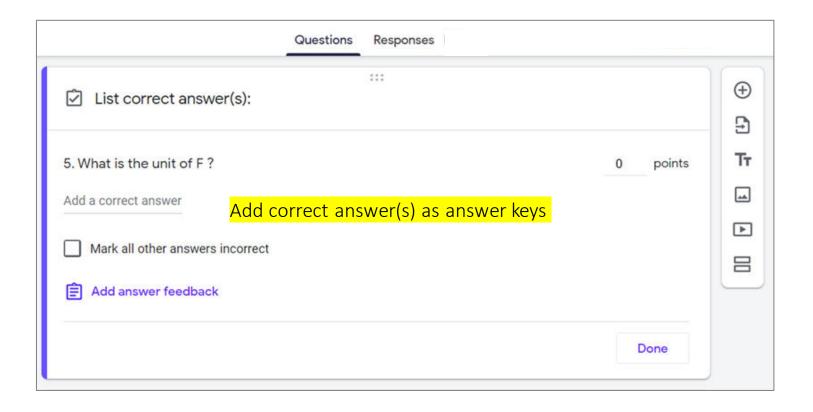
- Short Answer is an open end question that instead of choosing answer from available option answers, quiz participants write their own answer. The expected answer would be short.
- Short answer question type, actually make no difference between expecting text or number as answer. We make this separation for illustration purpose for the quiz maker.

### We are now developing answer keys for short answer type



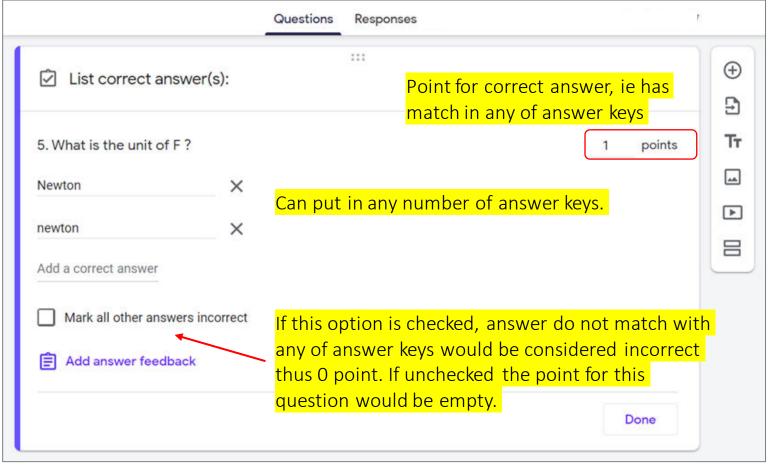
Expecting Text Answer (2)

Create list of correct answers for answer keys for the question.



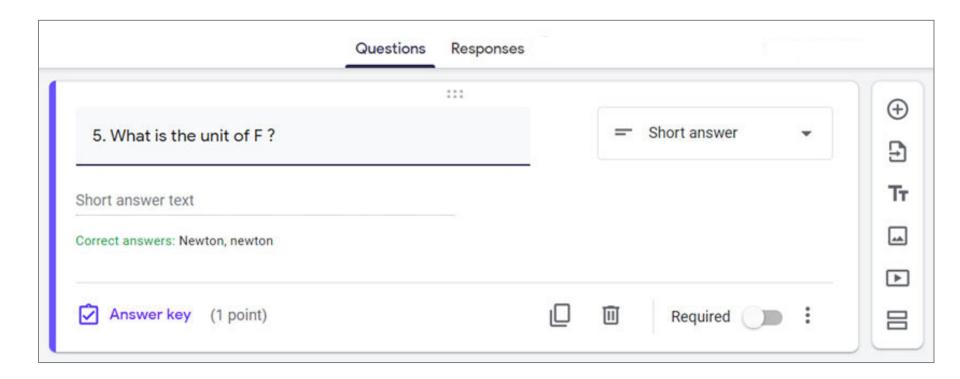
Expecting Text Answer (3)

- Imagine the more likely / expected ways respondent would write answer for the question.
- To be considered correct answer, the answer have to be exact match with any of key answers provided. It is case sensitive and typo is not allowed.



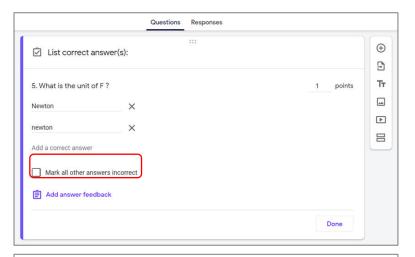
Expecting Text Answer (4)

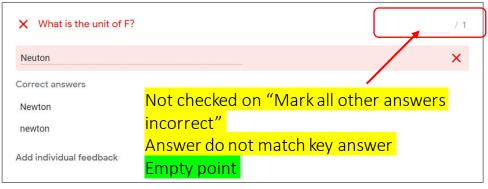
Setting answer keys and point for correct answer is completed, now back to question display

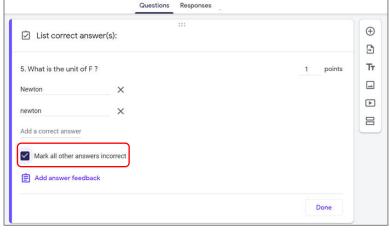


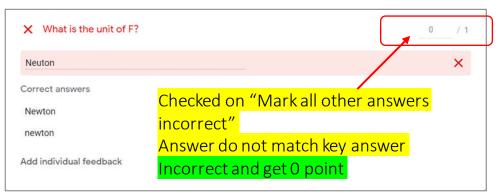
Expecting Text Answer (5)

Effect of 'Mark all other answers incorrect' in Answer Key on Point given





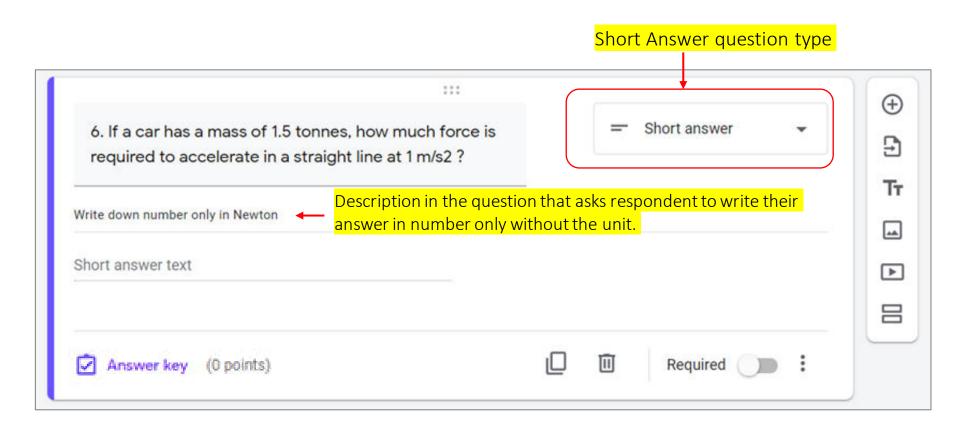




Another lesson from example above: For open question, after applying Answer Key, manual review to determine correct/incorrect in order to give point is still necessary.

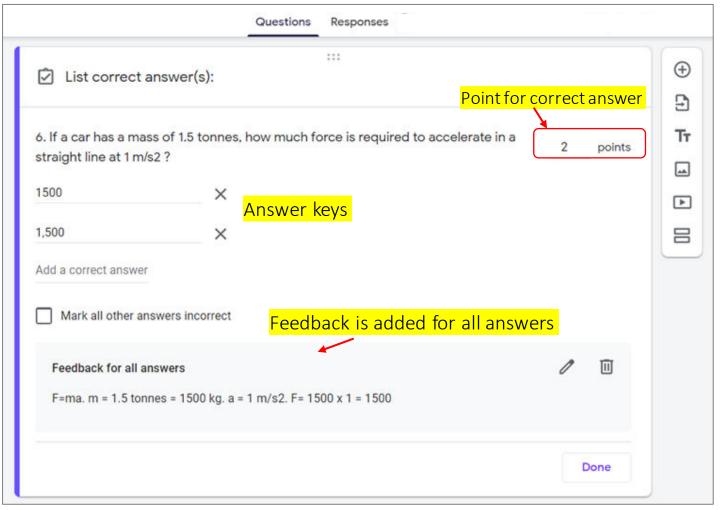
Expecting Numeric Answer (1)

Now a question that expects numeric answer.



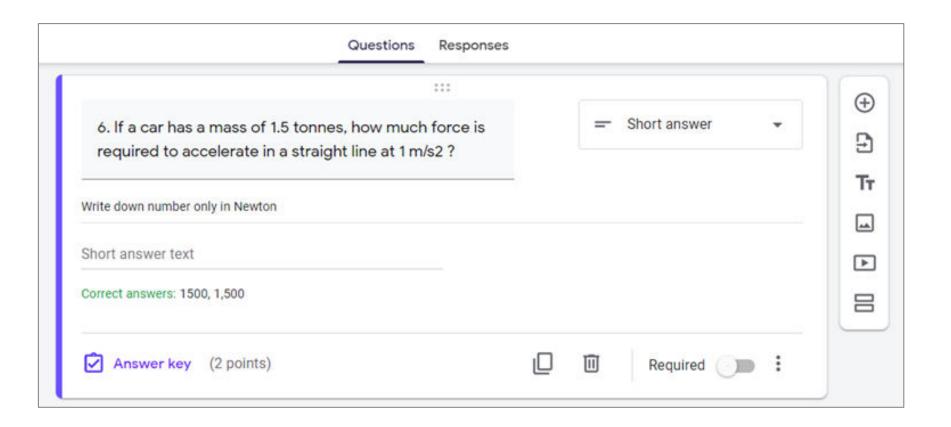
Expecting Numeric Answer (2)

 Key answers for this question is 1500 or 1,500 as we consider these are more likely ways respondents would write for thousands.



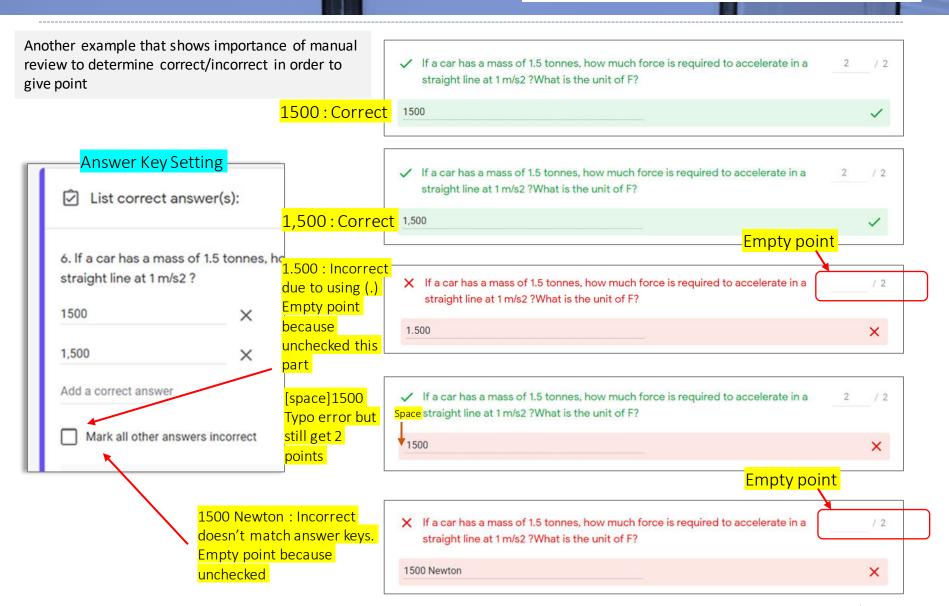
Expecting Numeric Answer (3)

Setting answer keys and point for correct answer is completed, now back to question display



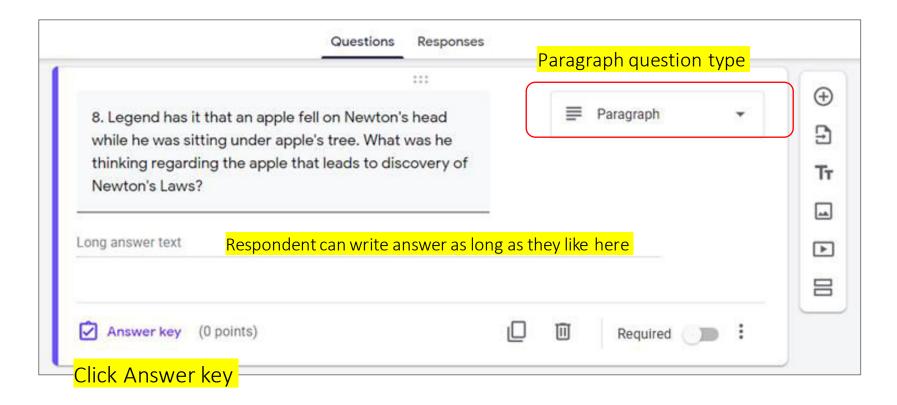
# Set Answer Key: Short Answer Expecting Numeric Answer (4)

 Illustration of respondents answer scenarios and their point



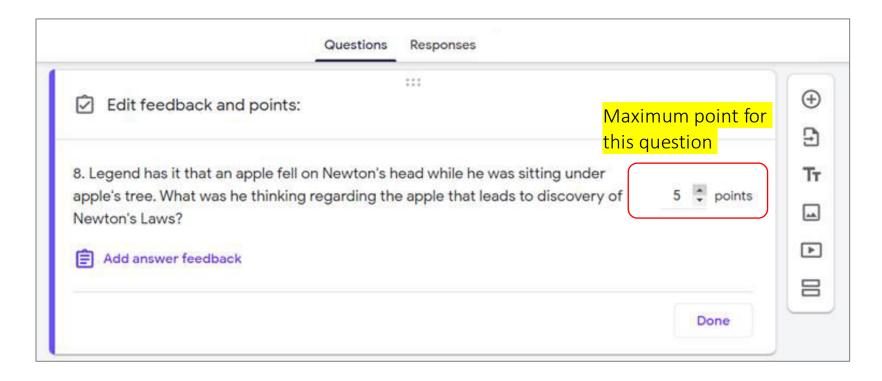
### Set Answer Key: Paragraph (1)

Paragraph is an open end question that instead of choosing answer from available option answers, quiz participants write their own answer. Answer is expected longer than that of Short Answer question type. In case of quiz/test, the paragraph type is common for essay question.

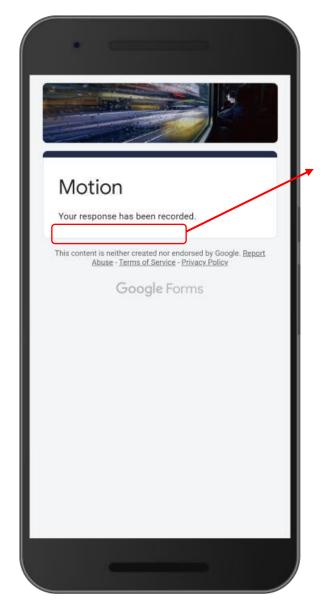


## Set Answer Key: Paragraph (2)

- With paragraph question type, there is no answer key to be set.
- We need however to set the maximum point for paragraph question. The point is necessary to calculate total available points for Grading. Also serves as guide when giving point during manual review.



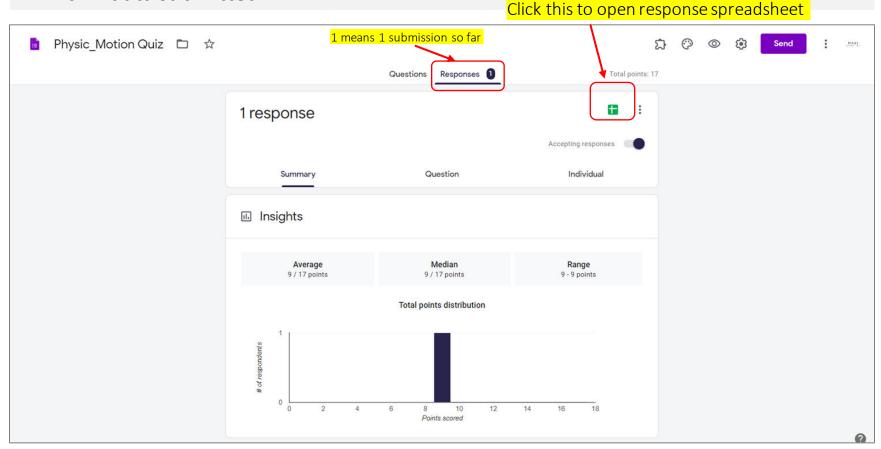
# Confirmation Page After Submit for Quiz with Grade Release Later No View Score Button



In case of Grade Release Later, on the Confirmation Page right after quiz is submitted there is no button to View Score.

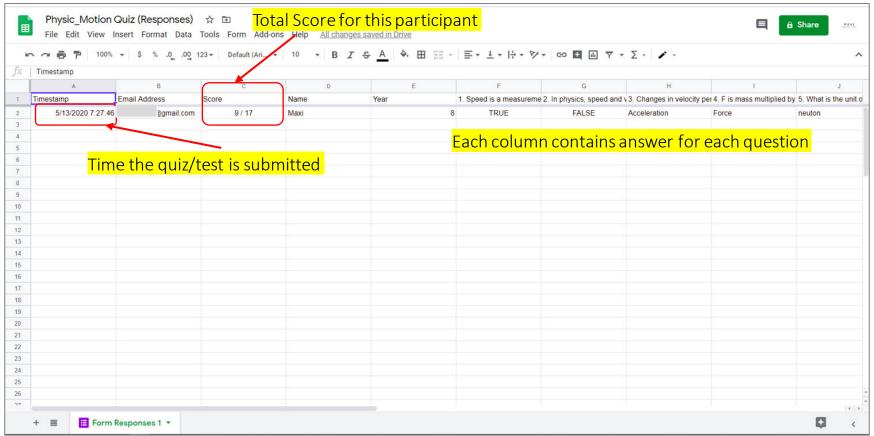
# Open Submitted Data/Responses in Spreadsheet (1)

 Click spreadsheet icon to open responses in spreadsheet. This is an example for quiz with 1 data submitted



# Open Submitted Data/Responses in Spreadsheet (2)

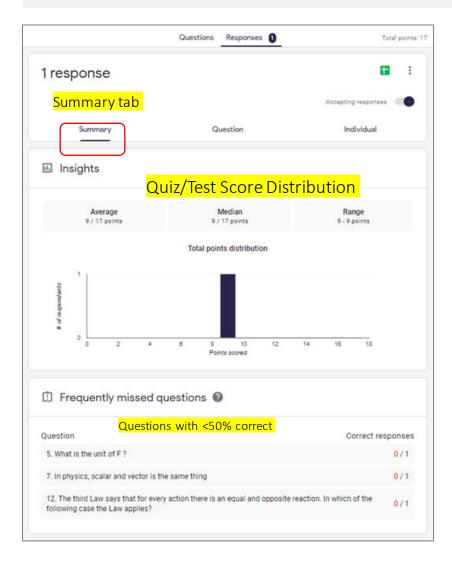
- In spreadsheet, in addition to answer for each question for each respondent, there is information on the total score.
  - If the quiz contains open end questions and before manual review/edit, the score is a temporary score, so far most likely comes from the closed end questions only, excluding open end questions.

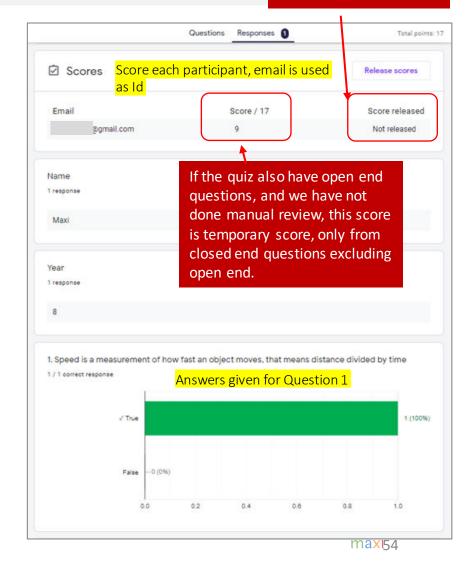


## Responses – Summary

Now we go to the Response – Summary (an example with only 1 submission).

Score for this participant has not been released

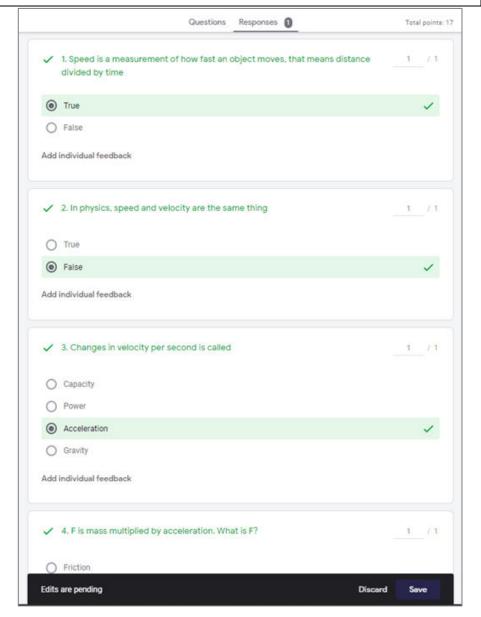




# Review Individual Response to Set / Edit Points and Give Feedback (1)

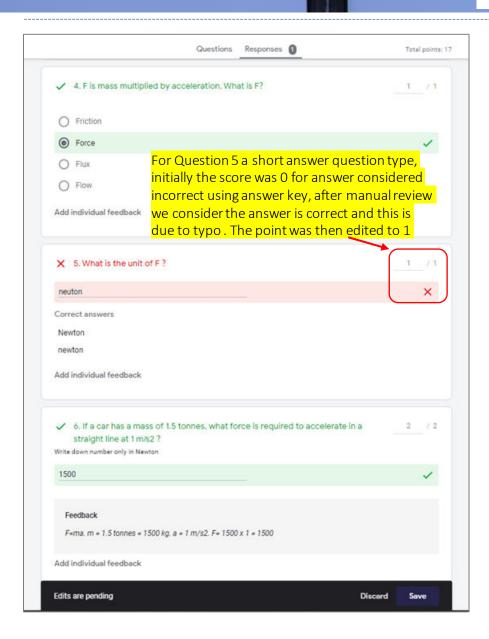
Questions Responses [] Total points: 17 1 response Individual tab We are looking at 1st Summary Individual individual out of 1 1 of 1 gmail.com -9 of 17 points Score not released Release score This individual has score of 9 before Motion manual review Now to wrap up the class, please fill out this guiz \* Required Set point 0 for empty point, in this case for non quiz question – about Email address \* name of participant wikantyoso@gmail.com 0 / 0 Name \* Maxi Set point 0 for empty point, in this Add individual feedback case for non quiz question – about year of participant Year \* Click to save edit now, or can be later until all edits are done Add individual feedback Edits are pending

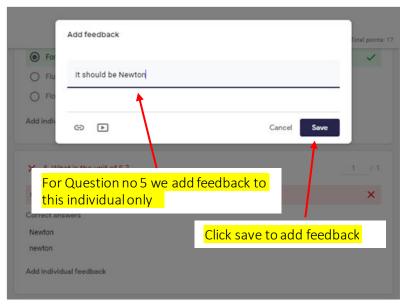
In manual review, you go to individual response, focus more on open end questions to set/give point/add feedback. Don't forget to give point 0 on Non Quiz questions (such as participants profile)



# Review Individual Response to Set / Edit Points and Give Feedback (2)

Example of editing point and adding feedback on Short Answer question



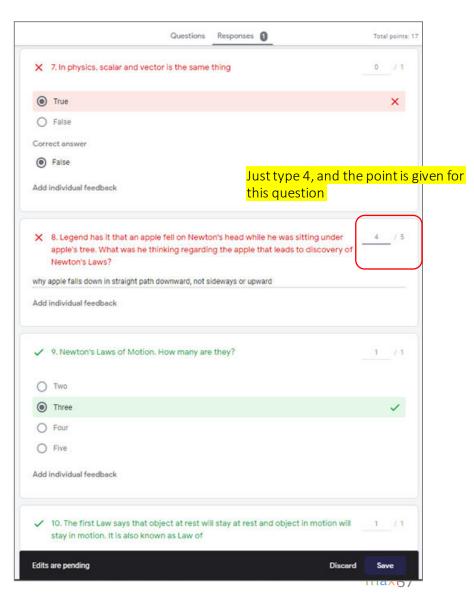


	Questions	Responses 0	Total points: 1
X 5. What is the unit of F?			/1
neuton			×
Correct answers			
Newton			
newton			
Individual feedback			0 11
It should be Newton	Fe	edback added	

# Review Individual Response to Set / Edit Points and Give Feedback (3)

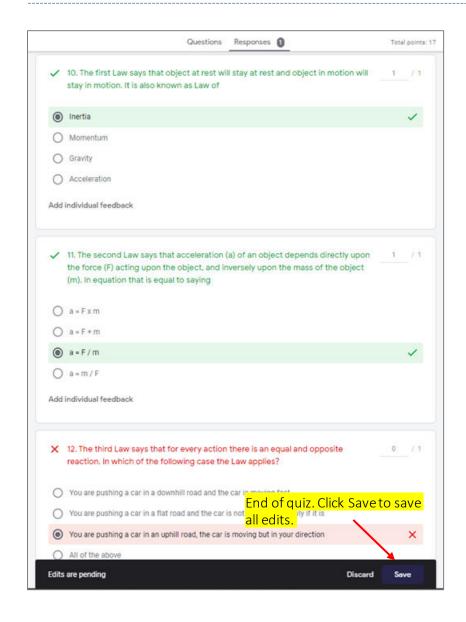
### Example of give point on essay question

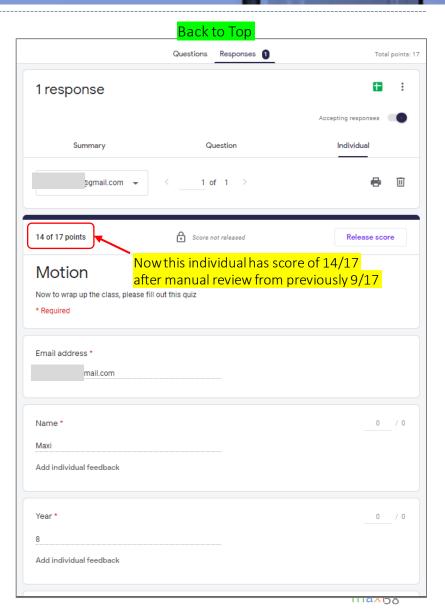
	7. In physics, scalar a	nd vector is the same thing	0 / 1
0	True		×
0	False rect answer False individual feedback	For Question 8 a paragraph question type. During development we deemed was allotted for this question. There answer key for essay question. The pempty. After manual review reading we decided to give 4 points.	ed 5 point is no point is no
why	apple's tree. What we Newton's Laws?	an apple fell on Newton's head while he was sitting under as he thinking regarding the apple that leads to discovery of hit path downward, not sideways or upward	/ 5.
~	9. Newton's Laws of I	Motion. How many are they?	1 /1
v 0	9. Newton's Laws of I	Motion. How many are they?	1_/1
> 0 0 0 Add		Motion. How many are they?	1 /1



# Review Individual Response to Set / Edit Points and Give Feedback (4)

### Save and Observe that Score is Now Updated



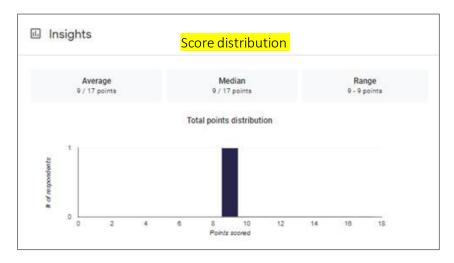


### Before - After Manual Review (1)

After manual review to edit/give points particularly for open end questions, changes in scores change summary of the quiz

Update in Response – Summary page

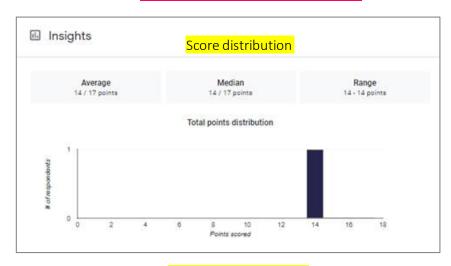
#### Before Manual Review



#### List of Individual Scores



#### After Manual Review



#### List of Individual Scores



9

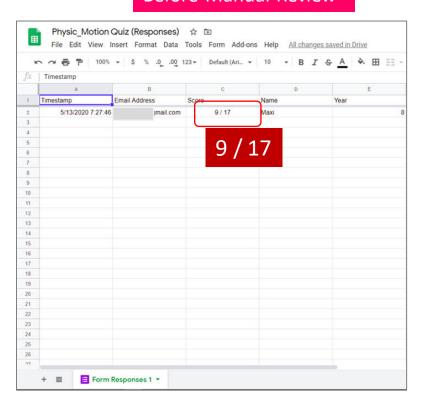
14

### Before - After Manual Review (2)

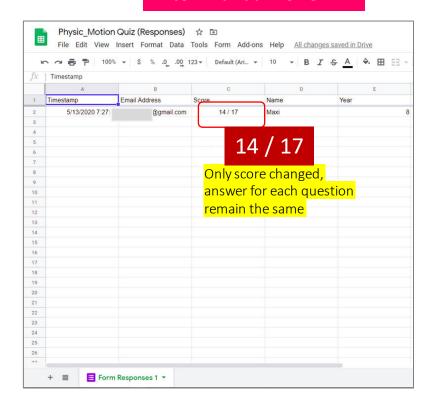
If you open the response spreadsheet, the total score changes

Update in Response Spreadsheet

#### Before Manual Review



#### After Manual Review

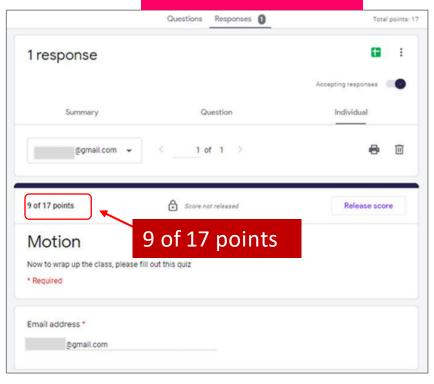


### Before - After Manual Review (3)

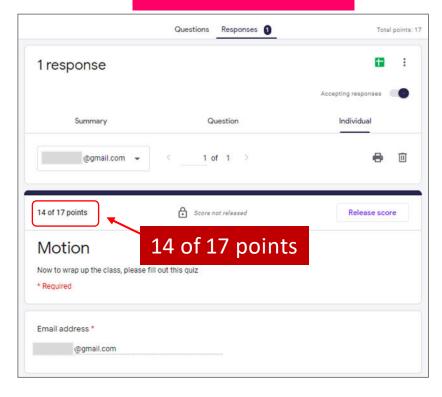
In Response – Individual, the total score changes including changes in point for each affected questions.

Update in Response - Individual

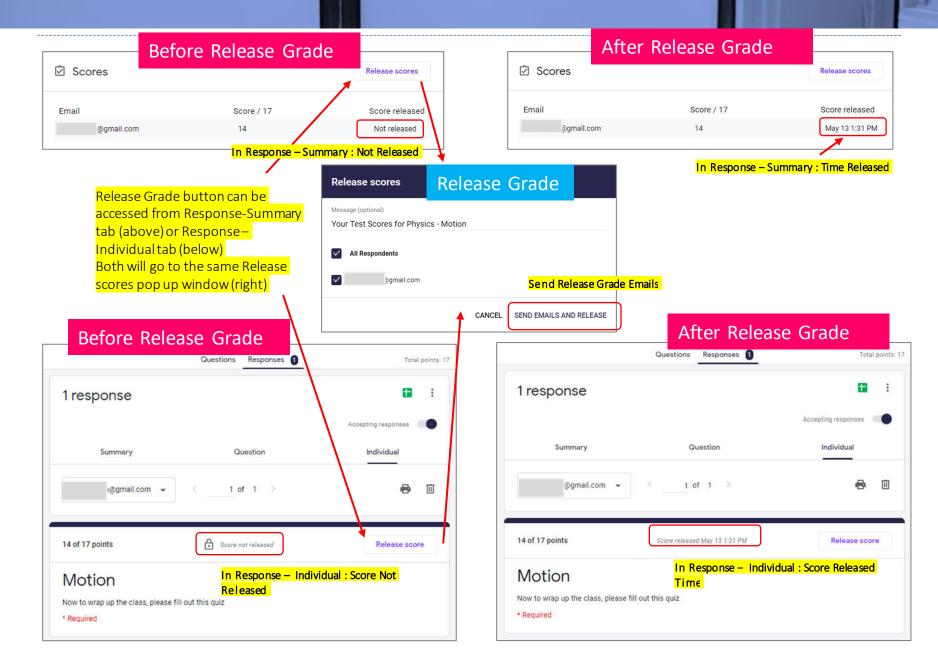
### Before Manual Review



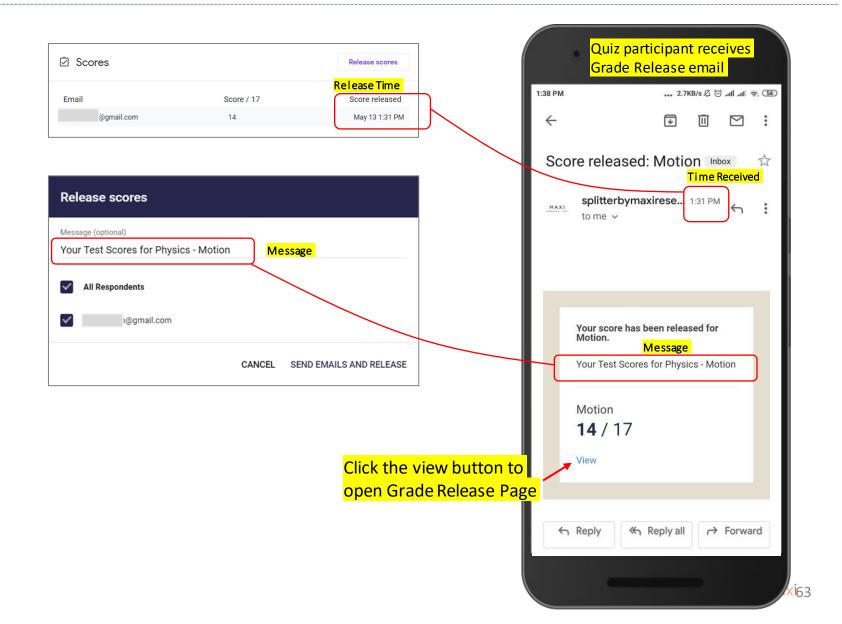
### After Manual Review



## Releasing Grade (1)

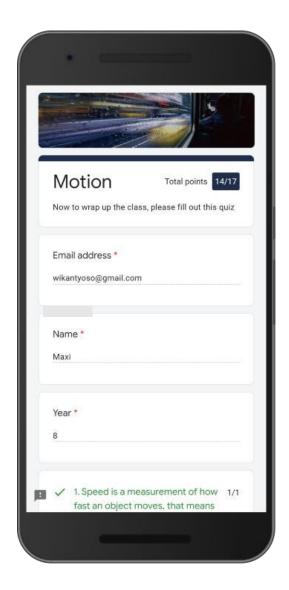


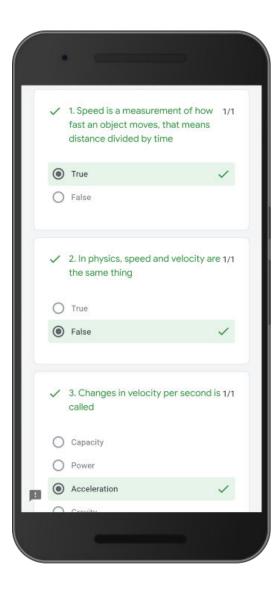
# Releasing Grade (2)

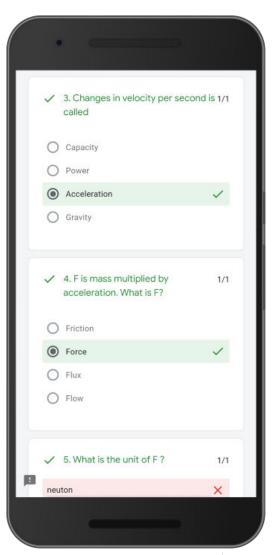


# Grade Release Page (1)

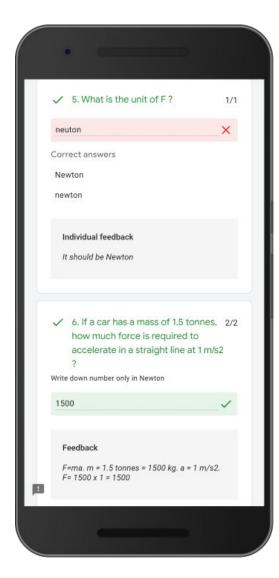
In Grade Release Page after Manual Review, Quiz Participants will see the final total score, point for each question and feedback if added.

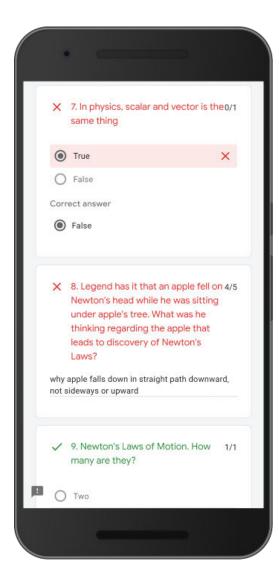


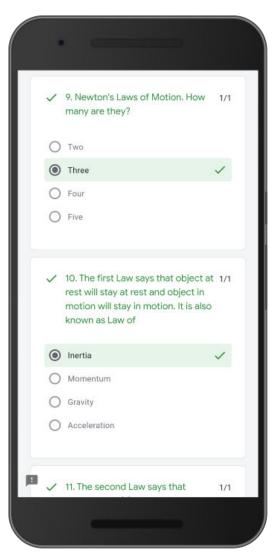




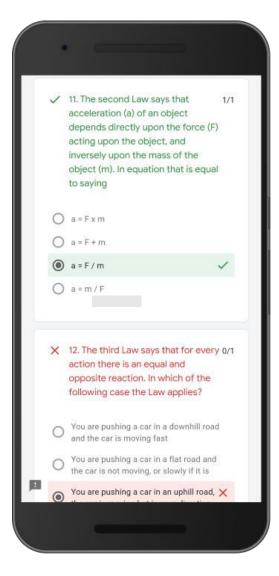
## Grade Release Page (2)

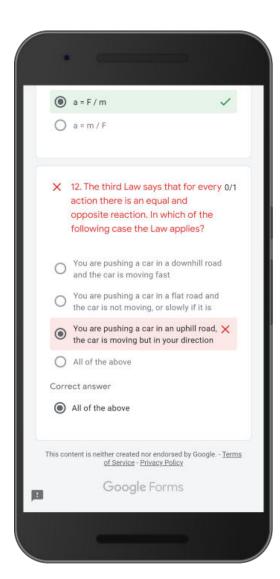






# Grade Release Page (3)





• End of the Grade Release page



# More Google Forms Materials

- GOOGLE FORMS TUTORIAL PART 1: CREATE ONLINE SURVEY
  - Download pdf <u>here</u>.
- Link to the Google Forms questionnaire/quiz used in this tutorial
  - Photosynthesis Click <u>here</u> to view, Click <u>here</u> to copy to your Gdrive
  - Motion Click <u>here</u> to view, Click <u>here</u> to copy to your Gdrive

