

How I Got My Mom to Play Through Plants vs. Zombies

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PopCap Games
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About me

I'm George Fan

**I like my steak well-done and my
Magic cards rare**

PLANTS vs. ZOMBIES





My Mom



My Mom

Non-gamer



My Mom

Non-gamer
Favorite food: lettuce



My Mom

Non-gamer

Favorite food: lettuce

Zombies destroyed: 4395



My
Non-g
Favorite f
Zombies de







“Why are you killing old men?”

Disclaimer:
Plants vs. Zombies is NOT
a game about killing old men





?



Tutorial
Strategy
Pacing
Game Balance
Consistent Rewards
Unit Design





Tutorial

Strategy

Pacing

Game Balance

Consistent Rewards

Unit Design



I'm going to talk about tutorials

Tutorials are important!



7975

25

125

100

325

150

125

300

17,830

Survival: Endless - 35 flags completed



**The final boss
in your game
just got worked.**

By me.

Booyah!*

***not an actual quote from my mom**

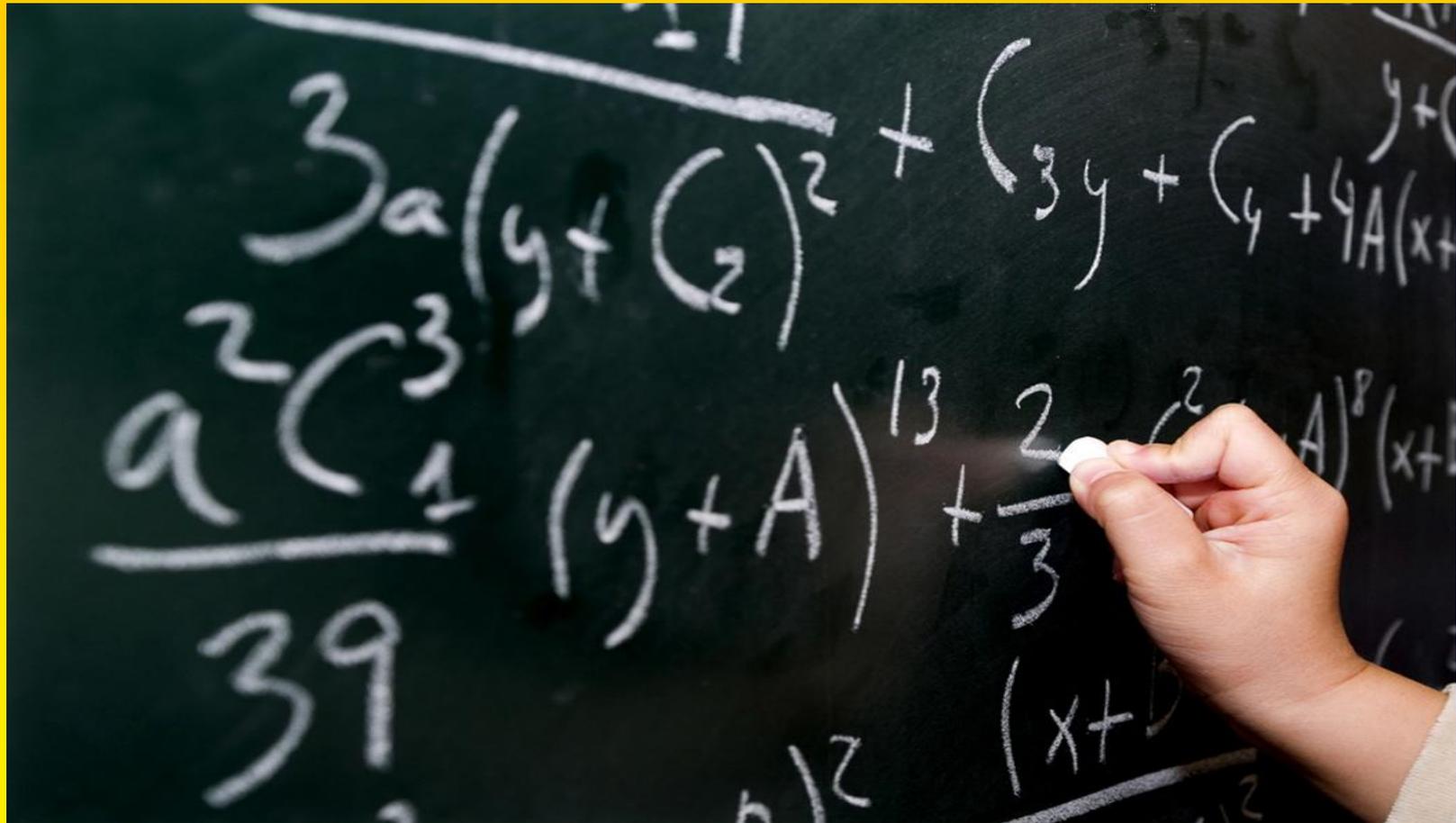
PLANTS VS. ZOMBIES™



10 tips for making your tutorials better

AKA a Tutorial on Tutorials

**1. Blend the tutorial
into the game**



Learning is hard

MAIN MENU

NEW GAME

TUTORIAL

OPTIONS



MAIN MENU

NEW GAME

KILL MYSELF

OPTIONS

**Reality: Learning in
games is actually fun**



This isn't the tutorial you're looking for

TUTORIAL

Pan Camera



Rotate Camera



Zoom In / Out



NAVIGATION

1. Swipe with one finger to pan
2. Swipe with two fingers to rotate the camera view
3. Pinch your fingers to zoom in and out

Skip

SECRET OF EVERMORE™

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SQUARESOFT

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Redmond, WA, 98052

For Square Soft Customer Service/Game Counseling Call
(206)861-0303
Automated 24 Hours
Live Service Mon-Fri, 8 am to 5 pm PST

PRINTED IN USA

SQUARESOFT
INSTRUCTION BOOKLET



SUPER MINTED
PERFORMANCE



is just a 7 hour tutorial for



“Tutorial? That game had a tutorial?”



The Tutorial Chameleon

**Now you
see me...**



**Now you
don't!**



**2. Better to have the player
“do” than “read”**



Let the player try stuff out in a safe environment



Zombies walk to the left in a straight line
Peas shoot to the right in a straight line





Let the player try stuff out in a safe environment

The shovel “tutorial”





Did you know you could use your shovel to dig up plants to replace with others?



Attempt #1-Get rid of weeds!





= gets rid of harmful things?



Attempt #2 – remove the wall-nuts!





Keep on removing wall-nuts and planting peashooters!

LEVEL 1-5

LEVEL PROGRESS



Attempt #4 – Clear the lawn (and go bowling)



Attempt #4 – Clear the lawn (and go bowling)



**3. Spread out the teaching
of game mechanics**

**You don't have to teach
everything right off the bat**

MAIN MENU

YOU GOT THE SHOVEL!



SHOVEL

Lets you dig up a plant
to make room for
another plant

NEXT LEVEL!





When you collect \$750, I'll sell
you something really neat-o!

click to continue

CRAZY DAVE'S TWIDDY DINKIES

Our prices are unbelievable!!!



\$750



\$1000



\$200



\$5000



\$5000

NEXT LEVEL



\$10

MAIN MENU

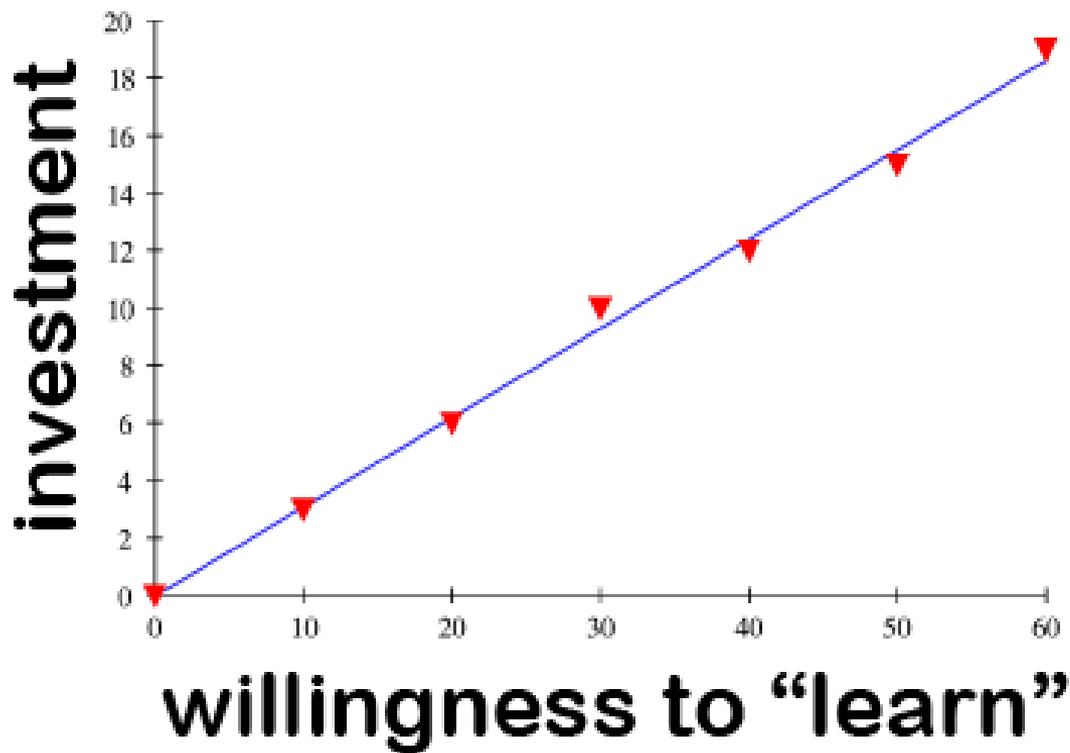
YOU FOUND A WATERING CAN!



WATERING CAN

Now you can play
Zen Garden Mode!

CONTINUE



Context is important

**Let players play with their
toys before introducing new
ones**



In-game shops can teach!

**4. Just get the player to do it
once**

Menu

 50	 0	 50	 100	 150	 50	 25
---	--	---	--	--	---	--



MENU

150

100



Click on a seed packet to pick it up!

MENU



150



188



Click on a seed packet to pick it up!



150



100

Menu



Click on the grass to plant your seed!



150



100

Menu



Click on the grass to plant your seed!

Menu



50



100



Nicely done!

Sunflower dilemma



**“My wife doesn’t understand
sunflowers”**

**“seems better to get your defenses in
place before investing in something
frivolous like extra sun”**

**-feedback from PopCap
employees**



 100	 100	 50	 150
---	---	--	---

25



MENU

LEVEL 1-4



		
---	---	---

**“I didn’t have a clue about
the value of sunflowers”**

**“I was just sitting there waiting for
enough sun to develop while the
zombies took my yard”**

**-feedback from PopCap
employees**

How did we fix this?

**Suggestion 1: make it more
like traditional TD**

**Suggestion 2:
Add tutorial messages**

**Suggestion 3:
Start with a column of
sunflowers**

**Suggestion 4:
Reserve spots for
sunflowers**

What did we end up doing?

200



MENU

LEVEL 1-2



 100	 100	 50	 150
---	---	--	---

25 ☀

MENU

LEVEL 1-4



LEVEL PROGRESS



Menu



50



100



50



Thank you, Fisher Price



MENU



50



100



50



MENU



50



100



50



150



50



MENU



50



100



50



150



50



25



175



**Had to rebalance the entire
game...**



25

25 minerals for an SCV? Madness!

5. Use Fewer Words

**Eight words on ~~the~~ screen
at any given time**

1 sentence vs. 4 sentences



150

100

MENU



Click on a seed packet to pick it up!



MENU

Hi, welcome to Plants vs. Zombies!
Please click on the seed packet
in the upper left corner by using
your left mouse button!
Seed packets turn into plants when
you place them on the grass!
Have fun!

150

100

MENU



Click on a seed packet to pick it up!



MENU

Hi, welcome to Plants vs. Zombies!
Please click on the seed packet
in the upper left corner by using
your left mouse button!
Seed packets turn into plants when
you place them on the grass!
Have fun!

YOU GOT A NEW PLANT!



SUNFLOWER

Gives you additional sun

NEXT LEVEL!



CHERRY BOMB

Blows up all zombies in an
area



FUME-SHROOM

Shoots fumes that can pass
through screen doors





FUME-SHROOM

Shoots fumes that can pass
through screen doors

							
70	75	75	25	0	50	25	



Think of it as...

“The Sophisticated Caveman”



“The Sophisticated Caveman”



**Shoots peas
at the
enemy**



**Blows up all
zombies in an
area**



**You got the
shovel!**

**“It was really bad and
that made me really sad”**

- George Fan, GDC 2011



**It was really bad
and that made
me really sad**

**Break your dialog up into
small bits**



You know, they used to call
me "Fog Man"

[click to continue](#)



'cause I would hang out in the
fog and **JUMP OUT AT**
PEOPLE!

click to continue



Ah, those were the days.

[click to continue](#)

THANKS LINK, YOU'RE
THE HERO OF HYRULE.



FINALLY,
PEACE RETURNS TO HYRULE.
THIS ENDS THE STORY.



Greetings, neighbor!

click to continue



150

100

The top of the image shows a brown UI bar. On the left is a glowing sun icon. To its right is a small card showing a green pea plant with the number '100' below it. Further right, the number '150' is displayed in a white box.





The name's Crazy Dave.

click to continue



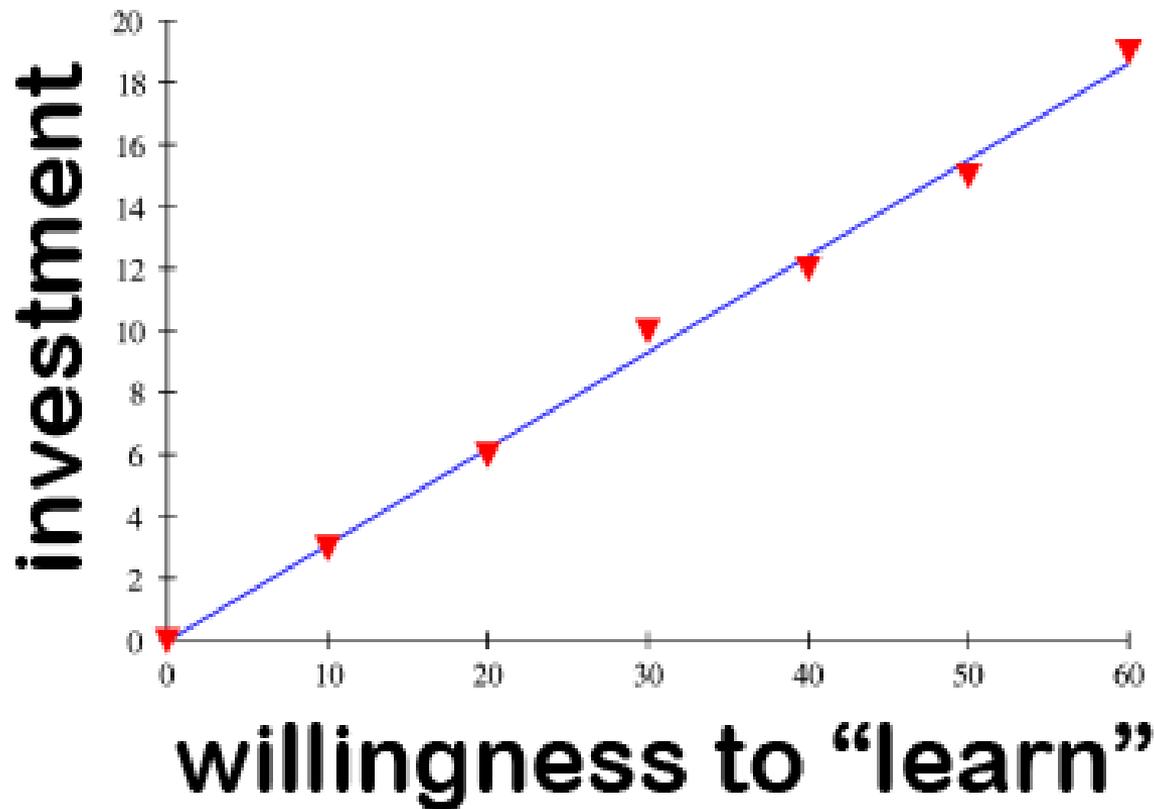
150

100

MENU

Click on a seed packet to pick it up!

Level 1-1



**6. Use unobtrusive
messaging if possible**

Don't break flow

A screenshot from the game StarCraft II showing a Protoss base under attack by a Zerg rush. A grey dialog box is overlaid on the center of the screen. The background shows Protoss structures like a Pylon and a Pylon with a Reactor, and a large group of Zerglings swarming the base. The dialog box contains the text: "I know you're in the middle of fending off a zerg rush, but please press 'OK'". At the bottom of the dialog box are two buttons: "Cancel" on the left and "OK" on the right.

**I know you're in
the middle of fending
off a zerg rush,
but please press 'OK'**

Cancel

OK

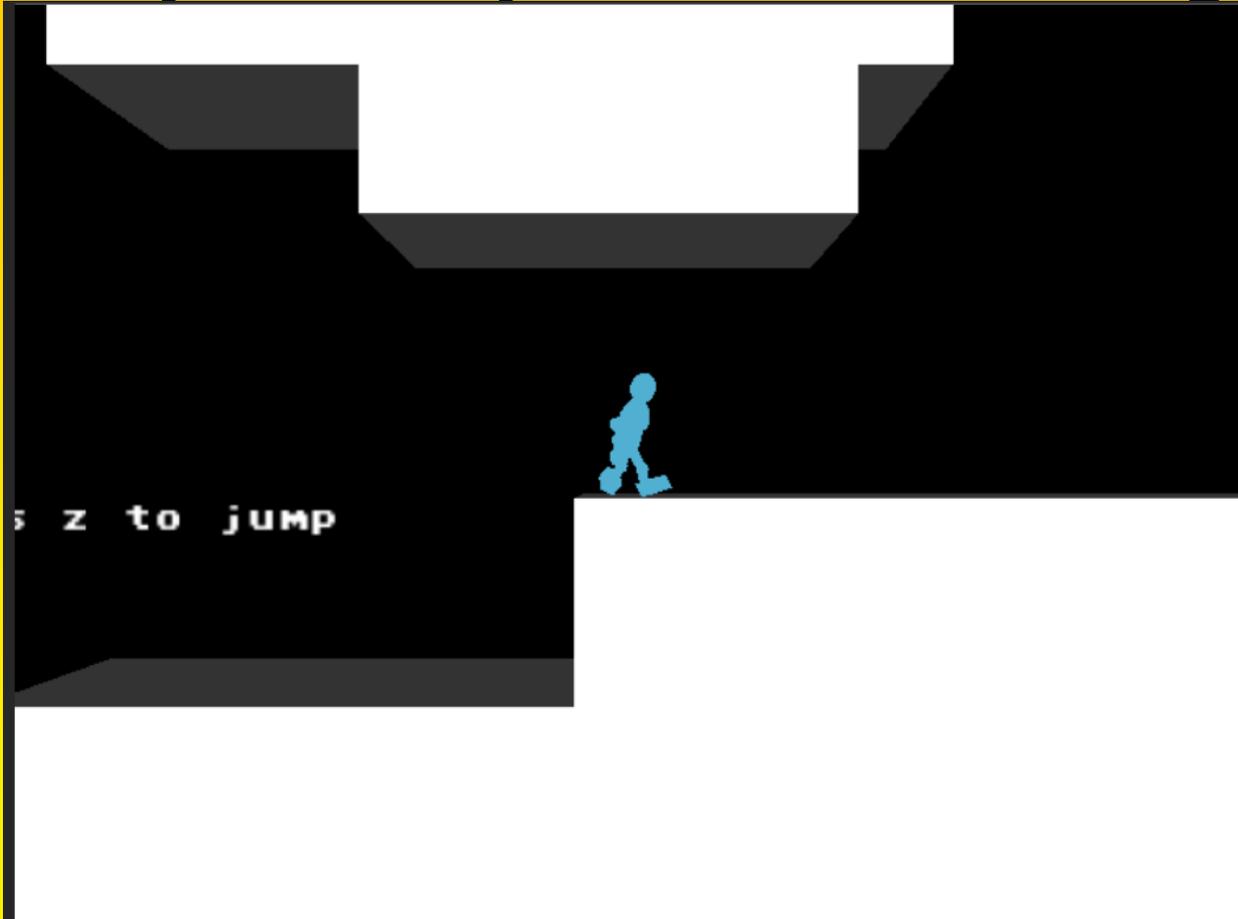
Examples of passive messaging



Examples of passive messaging



Examples of passive messaging



7. Use Adaptive Messaging

50

100

50

150

50

MENU



One of your peashooters died!
Try planting them further to the left!

Level 1-4

Watch someone play your game



50

100

50

150

50

MENU



One of your peashooters died!
Try planting them further to the left!

Level 1-4



“Duh! Of course you’re supposed to plant them on the left!”





“Do I look like a noob to you?!”



“DO YOU EVEN KNOW WHO I AM?!”



Try to plant at least 3 sunflowers!

75	100	50	150	50	25	



Planting sunflowers will improve your chances of surviving the zombie attack!

\$10 Level 1-6

Leave room for exploration



Tank 1-3

Game interface showing a menu of items for purchase:

- Item 1: Yellow fish, \$100
- Item 2: Green pill, \$200
- Item 3: Number 2, \$300
- Item 4: Red fish, \$1000
- Item 5: Empty shell, \$0
- Item 6: Red fish, \$1000
- Item 7: Purple bowl, \$2000

Current currency: \$ 365



Tank 1-3



Warning! Your carnivore has died!



Hint: Carnivores won't eat fish food!



Try feeding small guppies to your carnivores!

8. Don't create noise

50



ACHIEVEMENT UNLOCKED

You are reading this instead of what you are supposed to be reading

One of your peashooters died!
Try planting them further to the left!

Level 1-4





**blah blah blah
wolf wolf wolf**

Don't cry wolf



Don't cry, wolf

9. Use visuals to teach



**Make your game intuitive
and it will be easier to learn**

**Rule #1: You should be
able to look at a
plant/zombie and know what
it does instantly**

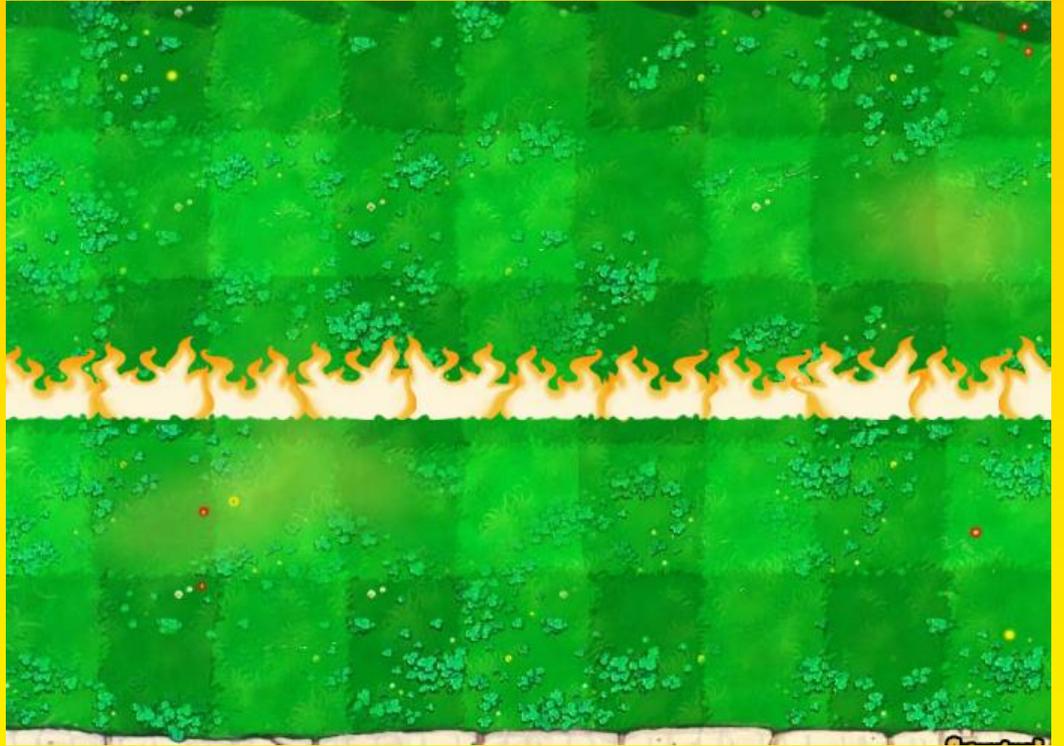








**Rule #2: If you can't
achieve rule #1, then you
should know what a
plant/zombie does after
seeing it do its "thing"**







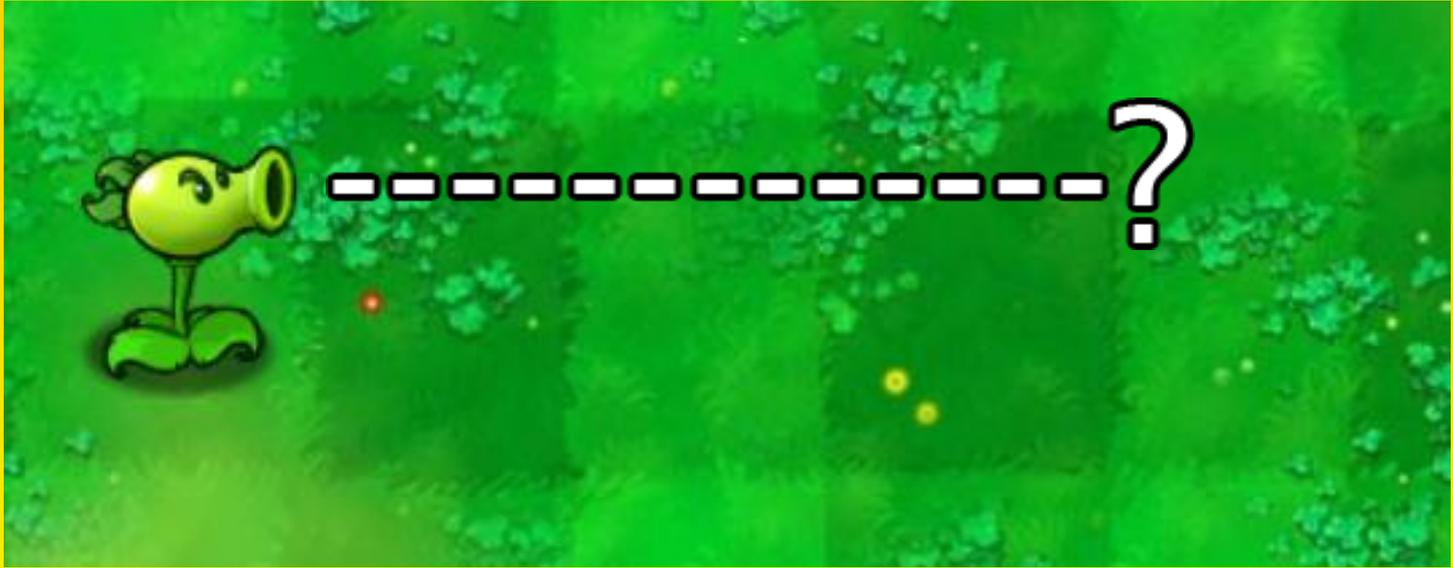
Repeater

=



Peashooter

x 2



What should the repeater shoot?



unacceptable: feathers



not good: “neutronius”



pretty good: swords



also pretty good: large peas



very good: twice the peas



best: volleys of 2 peas







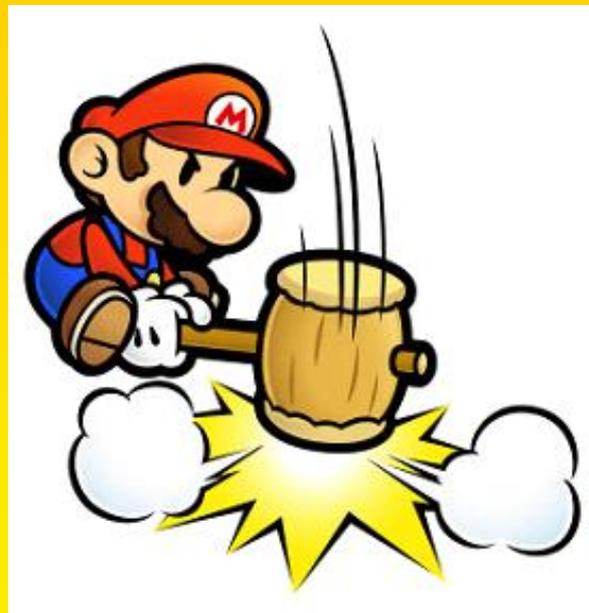




Jump



Hammer





Spiky = can't use jump



Flying = can't use hammer



can't use jump



can't use hammer



???????



**10. Leverage what people
already know**

The logo for the game "Plants vs. Zombies" is centered on a yellow background. The word "PLANTS" is written in a bright green, bubbly font with a black outline. The word "ZOMBIES" is written in a grey, blocky font with a black outline and a red shadow. Between the two words is a grey tombstone with a white flower on top and the letters "VS." on its face. The background of the logo is a blue sky with white clouds on the left and a purple sky with white clouds on the right.

PLANTS vs. ZOMBIES™





350

100

50

150

50

25

MENU





George's House



350

100

50

150

50

25

MENU





Tank 1-3





=





+



=



Zombie Toughness



>



>





Resource Representation



grows plants



buys stuff









**Plant names are
purposefully descriptive**



Peashooter

vs.



The Vindicator





Peashooter



Snow Pea



Threepeater



Repeater



Split Pea



Sunflower



Marigold



Wall-nut



Squash



Puff-shroom



Sun-shroom



Hypno-shroom



Magnet-shroom

Recap

1. Blend the tutorial into the game
2. Better to have the player “do” than “read”
3. Spread out the teaching of game mechanics
4. Just get the player to do it once
5. Use fewer words
6. Use unobtrusive messaging
7. Use adaptive messaging
8. Don't create noise
9. Use visuals to teach
10. Leverage what people already know
11. Everything can be made better by adding dragons





WELCOME BACK,

George!

IF THIS IS NOT YOU, CLICK HERE.

ADVENTURE

LEVEL 1-3

mini-GAMES

PUZZLE

SURVIVAL

OPTIONS

HELP

QUIT



Help for Plants and Zombies Game

When the Zombies show up, just sit there and don't do anything. You win the game when the Zombies get to your houze.

-this help section brought to you by the Zombies

MAIN MENU

it's over!