

Academic English: Intermediate

Cat coat genetics

- Look at all the photographs of cats that you brought. (You should have at least one each.)
- You will need to keep notes.

Cat coat genetics

- You should be able to identify four *Mendelian* genetic traits from photographs.
 - Hair length (L)
 - Completely white hair (W)
 - White spots (S)
 - Orange hair (O)
- (These are Mendelian traits. Other colors or patterns are more genetically complex.)

Cat coat genetics

Dominant gene (allele)

- Long hair is recessive.
- L (hair length)
 - LL short hair
 - Ll short hair
 - ll long hair

Recessive gene

*Write this down!
You'll need it later!*

Cat coat genetics

- White (mostly white hair with just one or two colored spots on the head) is dominant.
- W (white)
 - WW completely white
 - Ww completely white
 - ww some colored hair
- If the cat is WW , you can't judge S or O .

Cat coat genetics

- Piebald spotting (some white among other colors) is dominant.
- S (white spots)
 - SS some white hair
 - Ss some white hair
 - ss no white hair
- SS or Ss might have just a little white, or half of their coat might be white.

Cat coat genetics

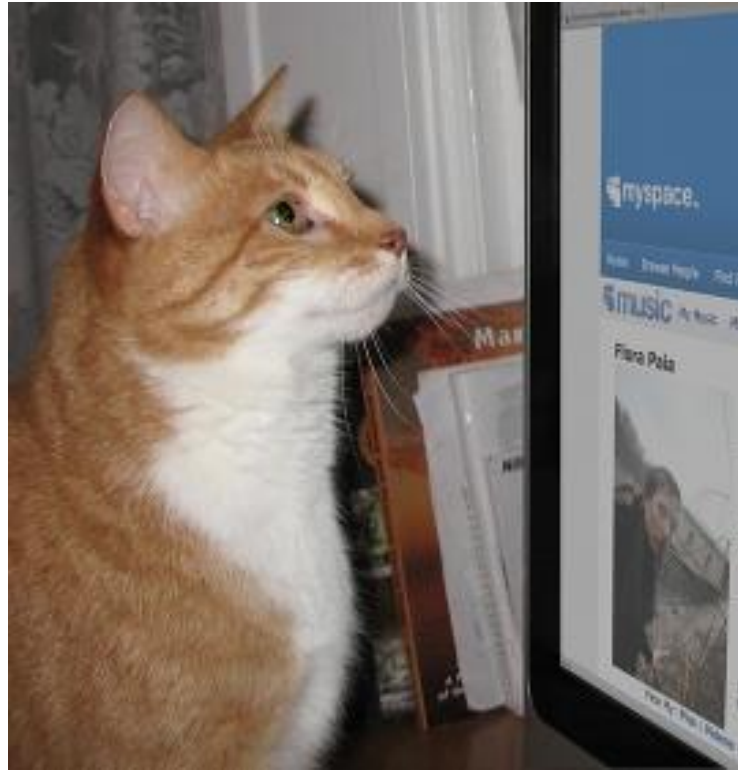
- Orange hair is Mendelian, but color is also affected by other genes.
- O (orange)
 - OO orange *or* cream color
 - Oo orange and black, *or* cream and gray
 - oo black *or* gray
- The O gene is sex-linked. Orange males are rare.

Cat coat genetics

- Look at each cat picture.
- Which genes does the cat have for these traits?

L	W	S	O
LL	WW	SS	OO
Ll	Ww	Ss	Oo
ll	ww	ss	oo

Cat coat genetics



Donald H. MacDonald
Myths of Human Genetics

L	W	S	O
L—	WW	S—	OO

Cat coat genetics

- Which genes does each cat have for L, W, S, O traits?

L	W	S	O
L—	W—	S—	OO
			Oo
ll	ww	ss	oo

What is plagiarism?

*Plagiarism is using others'
ideas and words
without clearly **acknowledging**
the source of that information.*

(Indiana Writing Tutorial Service, 2011)

What is plagiarism?



- Get **ideas** from books, lectures, other sources.
- Don't take **sentences** or long phrases from those sources *without citing them*.
- **Plagiarism:** use ideas, words *without giving credit*
 - No credit: **plagiarism, cheating, stealing**
 - Give credit: engaging with sources; good



You must give credit

to the one who said it.

(or thought of it)

Why is plagiarism bad?

- Rules:
 - Teachers want to check your ability.
 - Teachers or schools will punish you.

Why is plagiarism bad?

- Norms:
 - Politicians (for example) are expected to *believe* what they say. (Someone else might think of it.)
 - Scientists (for example) are expected to *discover* what they say. (Someone else might help write it.)
 - Students (for example) are expected to *learn, know, and be able to write* what they say.

Why is plagiarism bad?

- Ethics: Be good.
 - Scientists are judged by the ideas they create.
 - Give credit to the scientists who inspire you.
 - Someone may give you credit in the future.

What counts as plagiarism?

- Copying exact words
- Rewriting sentences in your own English
- Learning new ideas without giving credit

Copying exact words

Darwin knew that species changed over generations, but he did not know how this happened. Mendel provided the answer.

Copying exact words

“Darwin knew that species changed over generations, but he did not know how this happened. Mendel provided the answer” (Bowring et al. 2014, p. 70).

Copying exact words

“Darwin knew that species changed over generations, but he did not know how this happened. Mendel provided the answer” (Bowring et al. 2014, p. 70).

- Use quotation marks, give credit = Not plagiarism

Rewriting in your own English

Darwin knew that animals evolved over time, but he did not know how this happened.

- Just changing a few words is still copying.
- Use a quotation...
- ...or rewrite it completely

Rewriting in your own English

Darwin discovered evolution, but not the mechanism of change. Mendel's work on genes provided a missing piece (Bowring et al. 2014).

- Rewrite it in your own English.
- Don't forget to give credit.

Learned ideas without credit

We can see impact craters on the moon left by objects such as meteorites that crashed there (Bowring et alia 2014).

- Give credit, even if you use your own English.
- Didn't know before = Give credit
- Already knew = ...ちょっと難しい

Learned ideas without credit

- Already knew...

The sky is blue (~~Rayleigh 1881~~).

Lord Rayleigh's paper describing why the sky is blue was based on earlier work by John Tyndall (Gibbs 1997).

Citations have two parts

- In the paper, put the author's name and the year in parenthesis.
- Use quotation marks for direct quotes (same words).
 - Don't use quotation marks for paraphrase (rewritten in your own English).

Quoting

Dr. Andrea Neal explained why she is dedicated to keeping the ocean clean when she said, “The ocean is our life source. Not only is it a place where we see enjoyment, where we have fun and love it, but it is where we get our life and where we get our breath from” (Project Kaisei 2009).

- Use quotation marks.
- Don't change the author (or speaker's) words.

Quoting

“With so many things to do... many students put off assignments that do not interest them” (Harris 2004, p. 1).

- Give the author credit.

Paraphrasing

College students tend to be busy, so they may do uninteresting assignments at the last minute (Harris 2004).

- Even if you change the words, give credit.
- Be careful not to change the meaning.

Citations have two parts

- In the paper, put the author's name and the year in parenthesis.
- At the end of the paper, put a list of everything you quoted or paraphrased.

Project Kaisei. 2009. "Intro from the Kaisei." YouTube youtu.be/i8QpPUQzgcl

Harris, Robert. 2004. "Anti-plagiarism strategies for research papers." *Virtual Salt*.

Citations have two parts

Author name(s)

Include enough information so your reader could find the paper or book.

Year

Use *romaji* for non-English titles, names, etc.

Project Kaisei. 2009. "Intro from the Kaisei." YouTube youtu.be/i8QpPUQzgcl
Harris, Robert. 2004. "Anti-plagiarism strategies for research papers." *Virtual Sal*

Paper (etc.) title

Name of journal, web site, etc.

If you do your best to follow this rule,
usually you'll be OK.
Don't panic.

***You must give credit
to the one who said it.***

(or thought of it)