In this next module, I'm going to review one specific type of article that science writers write the science news,story. The science news story is the bread and butter of science writing.,Many magazines and newspapers have entire sections devoted to science news.,Most science news stories report about a single recently published paper, e.g.,The media covers many of the papers that come out weekly in Science and Nature, the science news story has a very scripted format, just like a scientific journal article.,So it's a fairly easy type of story to master.,I'm going to review the format in this module.,I just want to start by reminding you of something you probably learned in grammar school.,Any good news story should answer the five ws and the H, the who, what we are, win, why and how.,So keep that in mind. News stories follow a basic formula, just like scientific journal articles.,In fact, after I point these elements out to you, you'll start noticing them in every new story you read.,A new story contains a lead and then a nut graph, and then a 1st quote, and then the body of the story, which delves into the scientific study, and then finally, a kicker.,I'm going to go through each one of these elements.,In turn. I'll note that new stories are typically about 500 to 800 words long, but they can be shorter or longer than this.,The piece I'm going to use as an example in this module is actually a little bit longer than this.,The new story starts with the lead, which usually encompasses the 1st paragraph of the story.,This is the hardest part of the story to write.,Coming up with a lead takes time, thought and creativity.,I often spend more time coming up with the lead for a story than I too writing the rest of the story.,The lead has to grab the reader's attention, so it has to be catchy and relatively short.,Should be usually about one to two sentences, though in some instances it can be longer.,The lee should convey the heart of the matter, what some of what the story is about.,But it doesn't need to give away all of the five ws in the h It can also compliment and doesn't need to repeat information that the reader already got from the headline. Using good verbs can help make the lead engaging.,A surprising fact or statistic, a short description or a person's story may all make a good lead.,Here's an example of a lead from a story that I wrote before they went extinct.,Neanderthals and a less well known stone Age group called the denisovans um had interred with humans.,So weve got some Neanderthal genes in our gene pool.,Some of those genes are still in the human gene pool today.,This story was about some research done at Stanford that tried to explain why these genes are still hanging around the lead reads.,When the Neanderthals and other prehistoric human cousins went extinct around 30000 years ago, they didn't disappear completely.,A little part of them lives on in many of us.,Notice that I didn't give away all the details.,I'm just giving a flavor for what the story is about and enticing the reader to read on.,Shortly after the lead, the nut graph flushes out.,The story graph is short for paragraph.,The nut graph is usually contained in one paragraph, although it occasionally extends over multiple paragraphs.,The nut graph gives the nut of the story, the heart of the story.,It flushes out the who, what, why, when, where and how.,It tells the reader what the story is about.,When I work with young writers, the thing they most often leave out of their stories is the nut graph.,They fail to include a paragraph that tells the reader what the story is about.,You need this paragraph. You need to tell the readers what this story is about up front.,Don't keep readers guessing, or you'll lose them.,Here is the nut graph for the Neanderthal story.,It's the 2nd paragraph of the piece, and it reads In 2010, scientists revealed that sporadic couplelings between our ancestors and the Neanderthals,, as well as a related group of the Denisovans, left many of us with traces of their DNA in our genomes.,But the evolutionary impact was unclear.,Now, a team of scientists led by Peter Perham, professor of structural biology and of microbiology and immunology, has shown that these genetic exchanges significantly strengthened modern human immune systems.,Now, we know what the article is about.,There was some previous research that established that Neanderthals left genes in our gene pool, but we didn't know if there was any evolutionary reason,why those have persisted. The news here is that a new study at Stanford found that these genes strengthened our immune system.,That's basically the what, why and how.,The when is now,the who is Professor Peter Parkham.,We aren't explicitly told the where, but this was an article for a Stanford publication, so I didn't need to say explicitly that,harm is at Stanford. Somewhere not long after the nut graph, new stories will usually have a 1st quote.,The 1st quote often gives a big picture overview of why the research is important.,And then there may be quotes throughout the article.,Quotes are a lot of fun.,It can get scientists, if if you can get scientists to talk in lay person friendly terms, then you can quote them directly.,It gives a human dimension to the story and makes the reader feel like they're sitting there talking to the scientist.,Also, quotes can provide evidence. Journalists quote experts as sources.,Quotes can also provide opinions. Newswriters have to stick to the facts, but they can quote someone else expressing a particular opinion on a subject.,Quotes can be colorful, colorful and provocative.,They also help break the story up and move the story along the In the Neanderthal piece, the 1st quote was the following came right after the nut graph.,This is really the 1st evidence that there was something functional that was contributed from this admixture that was useful for modern humans, says Laurent aby Rashid.,Research associated in Poems Lab, and 1st author on the report in Science.,The 1st quote here tells you the big picture significance of their paper.,Just a few notes on attribution for quotes.,The convention is to put the name before the said, or says the noun goes before the verb, unless you want to insert a very long description in after the name, like blah, blah, blah blah, said, professor Smith, the really boring professor that we all had to take English from.,It would be awkward to put the said last there.,The verb really needs to go 1st in that case, just because it would be awkward to put it last.,Also, news writers generally stick to said or says as their verb.,Be careful about using other verbs like noted or remarked, those have connotations that may add unwanted meanings to the quote.,No did. E.G. implies that what the person said is a fact, so you have to be careful that if you use noted, you are intending to affirm that the statement is true.,Remarked implies that someone is saying something casually, and obviously verbs like cried or exclaimed or infused have overt connotations.,After we get the 1st quote, then we get into the body of the story, this is where we get all the details about the study.,This part may be long or short, depending on the overall length of the article.,You're going to review what led up to the study, the research, question, key experiments and findings.,And if the story is long enough, you may have some room for caveats and maybe an outside commentator.,You're going to use quotes throughout this to add flavor and break up this part of the story.,I'm not going to read through all of this, but you can pause and read it if you want to.,My article was pretty long for a news article, so I was able to sprawl a bit, but I'll just kind of go through the layout of what I put in the article.,So I started with a couple of paragraphs about what was done before.,Then I got to this study, where I gave the research question, key experiments and key findings, ,and then I had room to give some caveats and get an outside commentator as well as to give some potential implications.,So that was the body of the story.,Then at the end of the story, we get what's called the kicker.,This is the ending of the story.,It should leave the reader feeling satisfied.,It should leave the reader with a nice parting thought.,One trick is to circle back to the lead. If you started with a specific patient story, e.g., then end on what happened to that patient.,If you started with a description, then end with that description.,You can also end with a quote.,I often do that that way, the scientist gets to give the parting thought.,For my article on Neanderthals, this story was quite long, so the last paragraph's actually a little bit long for a new story.,I went into the potential implication of the fact that we still carry stone age genes.,In fact, it they were speculating that it might be a cause of autoimmune disease.,And I ended on a nice quote for param He says, this is all just speculation, but we have been apart for all this time,,so it would be very surprising if there weren't differences.,Poems says, it would solve a long standing puzzle.,And notice how I put the parm says,in the middle of that quote, so I could end on the quote rather than ending on the palm says.,So that is the structure of a science news story.,What I encourage you to do now is to go out and read some science news stories in The New York Times, in

在下一个模块中，我将回顾科学作家撰写的一种特定类型的文章，即科学新闻报道。科学新闻报道是科学写作的基础。许多杂志和报纸都有专门报道科学新闻的栏目。大多数科学新闻报道都报道最近发表的一篇论文。例如，媒体报道了许多每周发表的《科学与自然》论文。科学新闻报道的格式非常有剧本，就像科学期刊文章一样，因此这是一种相当容易掌握的故事类型。我将在本模块中复习一下格式。首先，我只想提醒你一些你可能在文法学校学到的东西。任何好消息都应该回答五个W和H、谁、什么、在哪里、何时、为什么以及如何回答。所以请记住这一点。新闻报道遵循基本公式，就像科学期刊文章一样。实际上，在我向你指出这些元素之后，你就会开始在你阅读的每篇新闻报道中注意到它们。新闻报道包含线索，然后是疯子，然后是第一句话，然后是深入研究科学研究的故事正文，最后是踢球者。我将依次介绍其中的每一个元素。我要注意的是，新闻报道的长度通常约为500到800个字，但可以比这更短或更长。我将在本模块中用作示例的那段内容实际上比这个长一点。新故事的开头通常包含故事的第一段。这是这个故事中最难写的部分。想出领先优势需要时间、思想和创造力。我花在想出故事线索上的时间通常比写故事其余部分的时间还要多。线索必须引起读者的注意。因此，它必须朗朗上口且相对较短。通常应该是大约一到两个句子，但在某些情况下可能会更长。主角应该用故事的一些内容来传达问题的核心，但它不需要透露所有五个W和H。它也可以补充读者已经从标题中获得的信息，不需要重复读者已经从标题中获得的信息。使用好的动词可以帮助线索引人入胜，一个令人惊讶的事实或统计数据，一个简短的描述或一个人的故事都可能成为一个好的线索。以下是我写的一个故事的线索示例。在他们灭绝之前，尼安德特人和一个名为丹尼索瓦人的鲜为人知的石器时代群体曾与人类杂交。所以我们的基因库里有一些尼安德特人的基因。其中一些基因至今仍存在于人类基因库中。这个故事讲述的是斯坦福大学进行的一些研究，这些研究试图解释为什么这些基因仍然存在。线索写道，大约3万年前，当尼安德特人和其他史前人类堂兄弟灭绝时，他们并没有完全消失。其中一小部分在我们许多人身上仍然存在。请注意，我没有透露所有细节。我只是在介绍这个故事的内容，并吸引读者继续阅读。线索结束后不久，疯子们把故事刷掉了。Graf是段落的缩写。nutgraf通常包含在一个段落中，尽管它偶尔会延伸到多个段落中。nutgraf给出了故事的核心，故事的核心。它冲洗了谁、什么、为什么、何时、何地和如何。它告诉读者故事是关于什么的。当我与年轻作家合作时，他们最常在故事中遗漏的就是疯子。他们没有包括一个段落来告诉读者这个故事是关于什么的。你需要这段话。你需要提前告诉读者这个故事是关于什么的。不要让读者猜测，否则你会失去他们。以下是尼安德特人故事的疯子。这是这篇文章的第二段，上面写着。2010年，科学家们透露，我们的祖先与尼安德特人以及丹尼索瓦人的相关群体之间的零星偶联给我们中的许多人留下了基因组中他们的DNA痕迹。但是进化的影响尚不清楚。现在，由结构生物学、微生物学和免疫学教授彼得·帕勒姆领导的一组科学家表明，这些基因交换显著增强了现代人类的免疫系统。现在我们知道这篇文章是关于什么的。先前有一些研究证实，尼安德特人将基因留在我们的基因库中，但我们不知道这些基因持续存在是否有任何进化原因。这里的新闻是，斯坦福大学的一项新研究发现，这些基因增强了我们的免疫系统。这基本上就是彼得·帕勒姆教授是谁、为什么、怎么样、现在是什么时候。我们没有被明确告知在哪里，但这是斯坦福大学出版物的一篇文章，所以我的意思不是要明确地说帕勒姆在斯坦福大学。不久之后，新闻报道通常会有第一句话。第一句话通常概述了为什么这项研究很重要，然后整篇文章中可能会有引文。语录很有趣。如果你能让科学家用非专业人士、友好的术语交谈，那么你可以直接引用他们的话，它就能吸引科学家。它为故事增添了人情味，让读者感觉就像坐在那里和科学家说话。报价也可以提供证据。记者引用专家作为消息来源。报价也可以提供意见。新闻作者必须坚持事实，但他们可以引用其他人对某个话题表达特定看法的话。语录可能丰富多彩，引人入胜。它们还有助于分解故事并推动故事向前发展。在尼安德特人的文章中，第一句话如下，紧随其后。帕勒姆实验室的研究助理、《科学》报告的第一作者洛朗·阿比-拉希德说：“这确实是第一个证据，证明这种外加剂对现代人类有用的功能性。”这里的第一句话告诉你他们论文的大局意义。只是关于报价归因的几点注释。惯例是将名字放在上述或说法之前。名词位于动词之前。史密斯教授说，除非你想在名字后面插入一个很长的描述，比如blah、blah、blah、blah、blah、blah、blah，等等，我们都必须从中学英语。把上述内容放在最后会很尴尬。在这种情况下，动词确实需要排在第一位，只是因为把它放在最后会很尴尬。此外，新闻作者通常坚持将说或说作为动词。使用其他动词（如注释或备注）时要小心。这些含义可能会给引文增添不想要的含义。例如，注意到意味着该人所说的话是事实。因此，你必须小心，如果你使用备注，你打算确认该陈述是正确的。Remarked暗示有人在随便说些什么，显然，诸如哭泣、惊呼或热情洋溢之类的动词具有明显的含义。在我们得到第一句话之后，我们进入故事的正文。在这里，我们可以获得有关该研究的所有细节。这部分可能是长的，也可以是短的，具体取决于文章的总长度。你要回顾一下导致这项研究的原因。研究问题、关键实验和发现，如果故事足够长，你可能还有一些注意的余地，也许还有外部评论员。在整篇文章中，你将使用引号来增加风味，分解故事的这一部分。我不打算通读所有这些，但如果你愿意，你可以停下来阅读。我的文章对于一篇新闻报道来说已经很长了，所以我可以稍微张开一点，但我只想看看我在文章中写的内容的布局。因此，我从几段关于以前所做的事情的段落开始。然后我开始了这项研究，在那里我给出了研究问题、关键实验和关键发现，然后我有空间提出一些警告，找一位外部评论员，并给出一些潜在的启示。所以这就是故事的正文。然后在故事的结尾我们得到了所谓的踢球者。这是故事的结局。它应该让读者感到满意。它应该给读者留下不错的离别想法。一个技巧是回归领先优势。例如，如果你从一个特定的患者故事开始，那就以该患者发生的事情为结尾。如果您从描述开始，则以该描述结尾。你也可以用引号结尾，我经常这样做。这样，科学家就可以思考离别了。在我关于尼安德特人的文章中，这个故事很长，所以对于新闻报道来说，最后一段实际上有点长。我探讨了我们仍然携带石器时代基因这一事实的潜在影响。实际上，他们猜测这可能是导致自身免疫性疾病的原因。最后我给帕勒姆写了一句不错的名言。他说：“这只是猜测，但我们一直处于分开状态，所以如果没有分歧，那将是非常令人惊讶的，”帕勒姆说。“这将解决一个长期存在的难题。”注意我是怎么把帕勒姆说的话放在那句话的中间，这样我就可以用引文结尾，而不是以Parham所说的结尾。这就是科学新闻报道的结构。我现在鼓励你去看看《纽约时报》、《自然新闻》、《科学美国人》等出版物上的一些科学新闻报道，看看你现在能否认出新闻报道的所有关键要素。