

Birds

From Page 9B

“There is a truth.”

I suggested he just ask the developers what that rule is, but Alain said that would be like skipping to the end of a good book or movie.

“I don’t want them to spoil my fun,” he said. “I don’t want them to tell me what happens in the movie ‘Thor’ either.”

Noches says he plans to start using “Angry Birds” in his regular curriculum starting next year, introducing each problem at the appropriate time to teach about things like the conservation of momentum and projectile motion.

“Video games are a nice addition to a physics teacher’s bag of tricks,” he said. “But I don’t see video games replacing sports, cards, or anything else relevant to our students. In fact, for my students’ final physics projects, there were groups that investigated baseball, wiffleball, golf, longboarding, and lacrosse. When we did projectile motion, I introduced the unit with the YouTube video of Kobe Bryant jumping over a swimming pool of snakes. They wanted to know if the video was real or fake.”

Rhett, who typically teaches upper level physics students and those with very specific focuses, has never brought “Angry Birds” into the classroom.

Burk, though, started using the game in his classroom straight away.

“They loved it,” he said. “I think students thought that it was a really interesting problem to think about why the gravitational field in the ‘Angry Birds’ world (if we assume that the birds are normal size) would be less than in the real world. If Rovio had chosen a realistic value for the gravitational field the motion would have happened much more quickly, and the game would likely not be as fun.”

The students have become so enthralled with their examination of the physics of “Angry Birds” fictional world that some have suggested moving on to another cell phone game: “Tiny Wings.”

The fact that video games like “Angry Birds” don’t always use the rules of real world physics just makes things more interesting and challenging for students, Burk said. That’s because instead of relying on the rules they already know to figure things out, students are asked to figure out who those new laws are and then to think about why a game designer decided to break the real rules of physics.

Next year Burk plans to take things further, having students pursue projects of their choosing to investigate the physics of a video game.

“With each game that gets released,” he said, “we get a whole new world to explore.”

Brian Crecente is managing editor of Kotaku.com, a video-game website owned by Gawker Media. Join in the discussion at kotaku.com/tag/well-played.

Archery

From Page 1

public is definitely invited to come and watch and participate in that. We’re also going to have some really big announcements regarding the expansion of the complex.”

Competition resumes the next day, with the U.S. National Target Championships held in conjunction with the Hoyt World Open from July 28-30.

“This is a big tournament that’s very spectator friendly,” Cull said. “And it’s kind of neat because they run a different format where they shoot qualifying rounds the first two days, and then shoot head-to-head to determine a champion.”

Archers who participate in all the events will also be eligible for a car shoot-off July 30 to win a brand new Ford Mustang.

Cull said that while there will be plenty going on outside, there will also be entertainment inside the complex headquarters.

“For the entire duration of the event, we’ll have a trade show set up inside the complex that will have all the major archery manufacturers and vendors,” he said. “We’ll have several seminars that are open to the public, too. Everything from forms and fundamentals of shooting to tips from the pros.”

For more information, visit <http://woaf.org>.

**Your News!
The Press &
Dakotan**

FRIDAY PRIMETIME/LATE NIGHT														JULY 15, 2011										
BROADCAST STATIONS	3:00	3:30	4:00	4:30	5:00	5:30	6:00	6:30	7:00	7:30	8:00	8:30	9:00	9:30	10:00	10:30	11:00	11:30	12:00	12:30	1:00	1:30		
PBS KUSD 2 8 (2)	Arthur (DVS)	WordGirl (DVS)	Wild Kratts	The Electric Company	Fetch! With Ruff Ruffman	Nightly Business Report	PBS NewsHour (N) (In Stereo)	Washington Week (N)	Need to Know (N) (In Stereo)	Market to Market	Playing for Change: Peace Through Music (In Stereo)	BBC World News	Charlie Rose (N) (In Stereo)	Tavis Smiley (N)	America's Heartland	Dakota Life	Great Performances							
KTVI 4 4 (4)	Extra (N)	Cash	Ellen DeGeneres	News (N)	News (N)	News (N)	Ent	Friday Night Lights "Always"	Dateline NBC (In Stereo)	News (N)	Jay Leno	Late Night	Late Night With Jimmy Fallon (In Stereo)	Carson	News (N)	Extra (N)								
NBC KDLT 5 5 (5)	The Doctors	Judge Judy	Judge Judy	KDLT News (N)	NBC Nightly News (N)	KDLT News (N)	Two and a Half Men	Friday Night Lights "Always" (Series Finale) The Taylors face several decisions. (N)	Dateline NBC (In Stereo)	KDLT News (N)	The Tonight Show With Jay Leno (In Stereo)	Late Show With David Letterman (In Stereo)	The Late Late Show With Craig Ferguson Actor Tim Daly. (N)	Last Call With Carson Daly	According to Jim	(Off Air)								
KCAU 6 6 (9)	Dr. Phil	Oprah Winfrey	The Oprah Winfrey Show	News	ABC News	News	Inside	Shark Tank	Primetype: What	20/20	News	Nightline	Jimmy Kimmel Live	Paid	Paid	(Off Air)								
CBS KELO 3 3 (11)	Dr. Phil (In Stereo)	The Oprah Winfrey Show	News	CBS Evening News	News	News	Entertainment Tonight (N)	Flashpoint Team One faces a noting crowd. (N)	CSI: NY A conspiracy theorist is found dead. (N)	Blue Bloods Two people collapse at a fashion show. (N)	News	Late Show With David Letterman (In Stereo)	The Late Late Show With Craig Ferguson Actor Tim Daly. (N)	News	The Insider (N)	Access Hollywood (N)								
ABC KSFY 13 7 (13)	The Ellen DeGeneres Show (In Stereo)	Be a Millionaire	Jeopardy! (N)	News	ABC World News	News	Wheel of Fortune	Shark Tank Mark Cuban upsets the other sharks. (N)	Primetype: What Would You Do? (In Stereo)	20/20 (In Stereo)	News	Nightline (N)	Jimmy Kimmel Live (In Stereo)	Inside Edition (N)	Curb Your Enthusiasm	Entourage	Extra (N)							
KMEG 13 13 (6)	Nate Berkus	The Doctors	News	KMEG 14	CBS	Jeopardy	Wheel	Flashpoint (N)	CSI: NY	Blue Bloods	News	Letterman	Late	Paid	Judge Mathis									
FOX KTTW 9 9 (7)	New Adv/Old Christine	New Adv/Old Christine	Swift Justice	Swift Justice	America's Funniest Home Videos (In Stereo)	How I Met Your Mother	How I Met Your Mother	Bones Liquefied remains in a tanning bed. (N)	House A patient has suspicious body scars. (N)	The Office "The Coup" "Two Weeks"	Scrubs "Her Story II"	Scrubs "My Journey"	Friends	Friends	Every-body-Raymond	Every-body-Raymond	Hates Chris	Hates Chris						
KLKN	Ellen DeGeneres	Dr. Phil	News	ABC News	News	Smarter	Shark Tank	Primetype: What	20/20	News	Nightline	Jimmy Kimmel Live	Paid	(Off Air)										
KOLN	Oprah Winfrey	First Just	Jeopardy	News	CBS News	Wheel	Flashpoint (N)	CSI: NY	Blue Bloods	News	Letterman	Late	Paid	Inside	Extra (N)									
KPTH	Jdg Judy	Justice	Simpsons	Simpsons	Two Men	Two Men	Bones	House	News	Office	Office	Mother	Raymond	Raymond	Friends	Friends	Fam. Guy							
KSCB 97	M. Jor	Phillips	Hillson	Zola Lev	Changing Back to J. Hagee	Rod P.	World Revival Church Services	Van Impe	Franklin	Word	Copeland	Life To J. Meyer	Sound	Second	Base	Church								
KSN 99 (12)	Arthur	Electric	Martha	WordGirl	Curious	PBS NewsHour (N)	Ebert	Wash. Inside	Market	Loc.	Lark Rise	Business	Dwarf	Dwarf	(Off Air)									
KXNE 8	Curious	Cy	Arthur	WordGirl	Wild	Electric	PBS NewsHour (N)	Quest NE	Loc.	Wash.	Need to Know (N)	News	Quest NE	Loc.	Served?	Served?	(Off Air)							
PAY CHANNELS																								
HBO 17 (46)	** Charlie's Angels: Full Throttle (2003) Cameron Diaz. (In Stereo)				*** Ocean's Eleven (2001) George Clooney, Matt Damon. (In Stereo)				* Couples Retreat (2009) Vince Vaughn, Jason Bateman. (In Stereo)				Real Time With Bill Maher (N)				Real Time With Bill Maher (N)				*** Independence Day (1996) Will Smith. Earthlings vs. evil aliens in 15-mile-wide ships. (In Stereo)			
HBO2	* I Love You, Beth Cooper				*** Spider-Man 2 (2004) Tobey Maguire.				Curb The Curious Case of Curt				* True Blood				* Repo Men (2010) Jude Law.				** Formula 51 (2001)			
MAX 4 (20)	* Our Family Thing				** Night at the Museum: Battle of the Smithsonian (2009) Ben Stiller.				** Devil (2010, Horror) Chris Messina. (In Stereo)				** A Nightmare on Elm Street (2010) (In Stereo)				Femme Fatales				** The Hills Have Thighs (2010, Madeleine Stowe. (In Stereo)			
MAX2	* The Good Girl				** The Jackal (1997) Bruce Willis.				*** Edge of Darkness (2010)				** Machete (2010) Danny Trejo.				* Cop Out (2010)				* Co-ed Confidential 4: Virgins Attack			
SHOW 18 (435)	Suburban				** Twilight (2008) Kristen Stewart.				** The Twilight Saga: New Moon (2009)				** The Twilight Saga: Eclipse (2010)				Boxing				The Franchise			
SHOW2	** The Answer Man				*** The Messenger (2009)				** Adventures of Power				Weeds The Big				The Real L Word				Big Brother After Dark (N) (In Stereo Live)			
CABLE	Filmmkr				** Handsome Harry (2009)				*** A Single Man (2009) Colin Firth.				** Antitrust (2001) Ryan Phillippe.				* Next Day Air (2009)				** Surveillance (2008)			
CABLE STATIONS																								
A&E 57 (41)	The Sopranos	Criminal Minds	Criminal Minds	Criminal Minds	Criminal Minds	Criminal Minds	Criminal Minds	Criminal Minds	Criminal Minds	Criminal Minds	The Glades	Criminal Minds	Criminal Minds	Criminal Minds	Criminal Minds	Criminal Minds	Criminal Minds	Criminal Minds	Criminal Minds	Criminal Minds	Criminal Minds	Criminal Minds		
AMC 41 (54)	"Kill Bill: Vol. 1"	*** Kill Bill: Vol. 2	(2004, Action) Uma Thurman.	*** Scarface (1983, Crime Drama) Al Pacino, Michelle Pfeiffer.	*** Scarface (1983, Crime Drama) Al Pacino, Michelle Pfeiffer.	*** Scarface (1983, Crime Drama) Al Pacino, Michelle Pfeiffer.	*** Scarface (1983, Crime Drama) Al Pacino, Michelle Pfeiffer.	*** Scarface (1983, Crime Drama) Al Pacino, Michelle Pfeiffer.	*** Scarface (1983, Crime Drama) Al Pacino, Michelle Pfeiffer.	*** Scarface (1983, Crime Drama) Al Pacino, Michelle Pfeiffer.	*** Scarface (1983, Crime Drama) Al Pacino, Michelle Pfeiffer.	*** Scarface (1983, Crime Drama) Al Pacino, Michelle Pfeiffer.	*** Scarface (1983, Crime Drama) Al Pacino, Michelle Pfeiffer.	*** Scarface (1983, Crime Drama) Al Pacino, Michelle Pfeiffer.	*** Scarface (1983, Crime Drama) Al Pacino, Michelle Pfeiffer.	*** Scarface (1983, Crime Drama) Al Pacino, Michelle Pfeiffer.	*** Scarface (1983, Crime Drama) Al Pacino, Michelle Pfeiffer.	*** Scarface (1983, Crime Drama) Al Pacino, Michelle Pfeiffer.	*** Scarface (1983, Crime Drama) Al Pacino, Michelle Pfeiffer.	*** Scarface (1983, Crime Drama) Al Pacino, Michelle Pfeiffer.	*** Scarface (1983, Crime Drama) Al Pacino, Michelle Pfeiffer.			
ANPL 19 (43)	Animal Nightmares	The Most Extreme	Untamed and Uncut	Whale Wars	Whale Wars	Whale Wars	Whale Wars	Whale Wars	Whale Wars	Whale Wars	Whale Wars	Whale Wars	Whale Wars	Whale Wars	Whale Wars	Whale Wars	Whale Wars	Whale Wars	Whale Wars	Whale Wars	Whale Wars			
BRAVO 25 (55)	Top Model	Top Model	Top Model	Top Model	Top Model	Top Model	Top Model	Top Model	Top Model	Top Model	Top Model	Top Model	Top Model	Top Model	Top Model	Top Model	Top Model	Top Model	Top Model	Top Model	Top Model			
CMTV 38 (77)	Extreme Makeover	Extreme Makeover	Extreme Makeover	Extreme Makeover	Extreme Makeover	Extreme Makeover	Extreme Makeover	Extreme Makeover	Extreme Makeover	Extreme Makeover	Extreme Makeover	Extreme Makeover	Extreme Makeover	Extreme Makeover	Extreme Makeover	Extreme Makeover	Extreme Makeover	Extreme Makeover	Extreme Makeover	Extreme Makeover	Extreme Makeover			
CNBC 53 (52)	Closing Bell	Options	Money in	Mad Money (N)	The Kudlow Report	60 Minutes on	60 Minutes on	60 Minutes on	60 Minutes on	60 Minutes on	60 Minutes on	60 Minutes on	60 Minutes on	60 Minutes on	60 Minutes on	60 Minutes on	60 Minutes on	60 Minutes on	60 Minutes on	60 Minutes on	60 Minutes on			
CNN 33 (49)	CNN Newsroom (N)	The Situation Room With Wolf Blitzer	John King, USA (N)	In the Arena	Piers Morgan	Anderson Cooper 360 (N)	Anderson Cooper 360 (N)	Anderson Cooper 360 (N)	Anderson Cooper 360 (N)	Anderson Cooper 360 (N)	Anderson Cooper 360 (N)	Anderson Cooper 360 (N)	Anderson Cooper 360 (N)	Anderson Cooper 360 (N)	Anderson Cooper 360 (N)	Anderson Cooper 360 (N)	Anderson Cooper 360 (N)	Anderson Cooper 360 (N)	Anderson Cooper 360 (N)	Anderson Cooper 360 (N)	Anderson Cooper 360 (N)			
COM 45 (61)	Comedy Futurama	South Park	Tosh.0	Scrubs	Scrubs	Daily	Colbert	Tosh.0	Tosh.0	Lewis Black: Red	Dane Cook Iso.	Harold & Kumar Go to White Castle	Chap	Chap	Dane Cook Iso.	Washington								
CSPAN 49 (17)	House of Representatives	Tonight From Washington	Tonight From Washington	Tonight From Washington	Tonight From Washington	Tonight From Washington	Tonight From Washington	Tonight From Washington	Tonight From Washington	Tonight From Washington	Tonight From Washington	Tonight From Washington	Tonight From Washington	Tonight From Washington	Tonight From Washington	Tonight From Washington	Tonight From Washington	Tonight From Washington	Tonight From Washington	Tonight From Washington	Tonight From Washington			
DISC 34 (44)	American Chopper	Cash	Cash	Chicago	Cash	Swamp Loggers	Swamp Loggers	Swamp Loggers	Swamp Loggers	Swamp Loggers	Swamp Loggers	Swamp Loggers	Swamp Loggers	Swamp Loggers	Swamp Loggers	Swamp Loggers	Swamp Loggers	Swamp Loggers	Swamp Loggers	Swamp Loggers	Swamp Loggers			
DISN 64 (36)	Good	Random	Shake It	Wizards	Phineas	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good			
DISXD 65 (163)	"Chicken Little"	To Be Announced	To Be Announced	To Be Announced	To Be Announced	To Be Announced	To Be Announced	To Be Announced	To Be Announced	To Be Announced	To Be Announced	To Be Announced	To Be Announced	To Be Announced	To Be Announced	To Be Announced	To Be Announced	To Be Announced	To Be Announced	To Be Announced	To Be Announced			
E!TV 51 (62)	E! Special	Khloe	Khloe	Khloe	Khloe	E! News (N)	E! News (N)	E! News (N)	E! News (N)	E! News (N)	E! News (N)	E! News (N)	E! News (N)	E! News (N)	E! News (N)	E! News (N)	E! News (N)	E! News (N)	E! News (N)	E! News (N)				
ENC 4 (88)	** "The Getaway" (1994) Alec Baldwin.	**** "Jaws" (1975) Roy Scheider.	**** "Jaws" (1975) Roy Scheider.	**** "Jaws" (1975) Roy Scheider.	**** "Jaws" (1975) Roy Scheider.	**** "Jaws" (1975) Roy Scheider.	**** "Jaws" (1975) Roy Scheider.	**** "Jaws" (1975) Roy Scheider.	**** "Jaws" (1975) Roy Scheider.	**** "Jaws" (1975) Roy Scheider.	**** "Jaws" (1975) Roy Scheider.	**** "Jaws" (1975) Roy Scheider.	**** "Jaws" (1975) Roy Scheider.	**** "Jaws" (1975) Roy Scheider.	**** "Jaws" (1975) Roy Scheider.	**** "Jaws" (1975) Roy Scheider.	**** "Jaws" (1975) Roy Scheider.	**** "Jaws" (1975) Roy Scheider.	**** "Jaws" (1975) Roy Scheider.	**** "Jaws" (1975) Roy Scheider.				
ESPN 28 (24)	2011 British Open Golf Championship	SportsCenter (N)	2011 British Open Golf Championship	2011 British Open Golf Championship	2011 British Open Golf Championship	2011 British Open Golf Championship	2011 British Open Golf Championship	2011 British Open Golf Championship	2011 British Open Golf Championship	2011 British Open Golf Championship	2011 British Open Golf Championship	2011 British Open Golf Championship	2011 British Open Golf Championship	2011 British Open Golf Championship	2011 British Open Golf Championship	2011 British Open Golf Championship	2011 British Open Golf Championship	2011 British Open Golf Championship	2011 British Open Golf Championship	2011 British Open Golf Championship				
ESPN2 29 (25)	NFL Live	J. Rome	Around	Pardon	Around	Pardon	2011 World Series of Poker Day 4, Part II.	Boxing Friday Night Fights (N) (Live)	2011 World Series of Poker Day 4, Part III. From Las Vegas. (N) (Live)	2011 World Series of Poker Day 4, Part III. From Las Vegas. (N) (Live)	2011 World Series of Poker Day 4, Part III. From Las Vegas. (N) (Live)	2011 World Series of Poker Day 4, Part III. From Las Vegas. (N) (Live)	2011 World Series of Poker Day 4, Part III. From Las Vegas. (N) (Live)	2011 World Series of Poker Day 4, Part III. From Las Vegas. (N) (Live)	2011 World Series of Poker Day 4, Part III. From Las Vegas. (N) (Live)	2011 World Series of Poker Day 4, Part III. From Las Vegas. (N) (Live)	2011 World Series of Poker Day 4, Part III. From Las Vegas. (N) (Live)	2011 World Series of Poker Day 4, Part III. From Las Vegas. (N) (Live)	2011 World Series of Poker Day 4, Part III. From Las Vegas. (N) (Live)					
EWTN 74 (65)	Story Divine	Truth in	Heavens	Church	Gallery	Daily Mass	Life on the Rock	Campus Rosary	The World Over	Rome	Women	Daily Mass	Life on the Rock	Parable	Defend									
FAM 62 (40)	70s Show	70s Show	Gilmore Girls	Still Stnd	Still Stnd	Funny Home Videos	Funny Home Videos	Funny Home Videos	Funny Home Videos	Funny Home Videos	Funny Home Videos	Funny Home Videos	Funny Home Videos	Funny Home Videos	Funny Home Videos	Funny Home Videos	Funny Home Videos	Funny Home Videos	Funny Home Videos					
FX 23 (56)	** "The Happening" (2008)	The Five (N)	Special Report	Boys in	Twins	MLB Baseball Kansas City Royals at Minnesota	Twins	Twins	Twins	Twins	Twins	Twins	Twins	Twins	Twins	Twins	Twins	Twins	Twins					
FXNWS 50 (48)	Neil Cavuto	The Five (N)	Special Report	Boys in	Twins	MLB Baseball Kansas City Royals at Minnesota	Twins	Twins	Twins	Twins	Twins	Twins	Twins	Twins	Twins	Twins	Twins	Twins						
FOXSP 35 (27)	World Poker Tour: PGA Tour Golf Viking Classic, Second Round. (N) (Live)	PGA Tour Golf Viking Classic, Second Round. (N) (Live)	PGA Tour Golf Viking Classic, Second Round. (N) (Live)	PGA Tour Golf Viking Classic, Second Round. (N) (Live)	PGA Tour Golf Viking Classic, Second Round. (N) (Live)	PGA Tour Golf Viking Classic, Second Round. (N) (Live)	PGA Tour Golf Viking Classic, Second Round. (N) (Live)	PGA Tour Golf Viking Classic, Second Round. (N) (Live)	PGA Tour Golf Viking Classic, Second Round. (N) (Live)	PGA Tour Golf Viking Classic, Second Round. (N) (Live)	PGA Tour Golf Viking Classic, Second Round. (N) (Live)	PGA Tour Golf Viking Classic, Second Round. (N) (Live)	PGA Tour Golf Viking Classic, Second Round. (N) (Live)	PGA Tour Golf Viking Classic, Second Round. (N) (Live)	PGA Tour Golf Viking Classic, Second Round. (N) (Live)	PGA Tour Golf Viking Classic, Second Round. (N) (Live)	PGA Tour Golf Viking Classic, Second Round. (N) (Live)	PGA Tour Golf Viking Classic, Second Round. (N) (Live)						
GOLF 55 (310)	PGA Tour Golf Viking Classic, Second Round. (N) (Live)	PGA Tour Golf Viking Classic, Second Round. (N) (Live)	PGA Tour Golf Viking Classic, Second Round. (N) (Live)	PGA Tour Golf Viking Classic, Second Round. (N) (Live)	PGA Tour Golf Viking Classic, Second Round. (N) (Live)	PGA Tour Golf Viking Classic, Second Round. (N) (Live)	PGA Tour Golf Viking Classic, Second Round. (N) (Live)	PGA Tour Golf Viking Classic, Second Round. (N) (Live)	PGA Tour Golf Viking Classic, Second Round. (N) (Live)	PGA Tour Golf Viking Classic, Second Round. (N) (Live)	PGA Tour Golf Viking Classic, Second Round. (N) (Live)	PGA Tour Golf Viking Classic, Second Round. (N) (Live)	PGA Tour Golf Viking Classic, Second Round. (N) (Live)	PGA Tour Golf Viking Classic, Second Round. (N) (Live)	PGA Tour Golf Viking Classic, Second Round. (N) (Live)	PGA Tour Golf Viking Classic, Second Round. (N) (Live)	PGA Tour Golf Viking Classic, Second Round. (N) (Live)	PGA Tour Golf Viking Classic, Second Round. (N) (Live)						
HALL 22 (33)	The Waltons	The Waltons	Little House/Prairie	Little House/Prairie	Little House/Prairie	Little House/Prairie	Little House/Prairie	Little House/Prairie	Little House/Prairie	Little House/Prairie	Little House/Prairie	Little House/Prairie	Little House/Prairie	Little House/Prairie	Little House/Prairie	Little House/Prairie	Little House/Prairie	Little House/Prairie						
HGTV 54 (34)	Cash,	Cash,	Cash,	First Pla.	First Pla.	Hunters	House H.	Hunters	Hunters	Hunters	Hunters	Hunters	Hunters	Hunters	Hunters	Hunters	Hunters	Hunters						
HST 46 (47)	Modern Marvels	Modern Marvels	Modern Marvels	Modern Marvels	Modern Marvels	American Pickers	Pawn	Pawn	American	American	Stan Lee's	American Pickers	Pawn	Pawn	American	American	American							
KAUN 15 (22)	Naked City	Route 66	I Spy	Daniel Boone	Highway to Heaven	Starsky and Hutch	Police Story	The Saint	Da Vinci's Inquest	Cold Case Files	Paid	Paid	Paid	Paid	Paid	Paid	Paid							
KWSD 12 (14)	Paid	Paid	King	King	70s	70s	Seinfeld	Seinfeld	Smallville	Supernatural	Payne	Browns	Rose	Rose	South Pk									