Junior and Intermediate Class #1 – Cookware

Taylor is moving into her first apartment to attend a four-year university. She needs a durable, easy to care for cookware set that will last through her college years. Her budget is \$175.00. Which product should she buy?

| | #2 | #3 |
|---|--|---|
| T-fal Ultimate Stainless Steel | Circulon Infinite Hard Anodized | Chef's Star Professional Grade |
| Copper Bottom 12-Piece Set | Nonstick 10-Piece Cookware Set | Stainless Steel 17 Piece |
| | | Cookware Set with Impact- |
| | | bonded Technology |
| Price: \$170.00 | Price: \$159.93 | Price: \$305.99 |
| Stainless Steel | Heavy-weight Aluminum | • 1.6 and 2.5 Quart Saucepans |
| Copper bottom | Stainless steel bases | with lids |
| Dishwasher safe | Non-stick exteriors | • 4.2 Quart Casserole with Lid |
| 8-inch and 10.5-inch fry pans | Dishwasher safe | • 8.6 Quart Stock Pot with Lid |
| • 1, 2, and 3-quart covered sauce | Lifetime warranty | 8" and 9.5" Frying Pans |
| pans | • 1-1/2- and 2-quart covered | • 11" 5.5 Quart Sauté Pan with |
| • 5.5-quart covered Dutch Oven | saucepans | Lid |
| stainless-steel spoon and | 8-quart covered stockpot | • 9.5" Boiler Basket |
| slotted turner | 3-quart covered sauté pan | • 9.5" Steamer Basket |
| | 8- and 10-inch open skillets | Spoon, 2 Prong Fork, Slotted Spatula |



Junior/Intermediate Class #2 - Outdoor Backpacks

Lucy, who is very active outdoors, is going on a backpacking trip (4 days, 3 nights). She will be traveling with some friends through parts of the Appalachian Mountains. She needs a backpack that is lightweight, but has plenty of space for all her stuff (water, sleeping bag, clothes, etc.). She would like the backpack to have a rain cover and outside compartments. Her waist size is a 30 and torso size is 16 inches. She has \$250 to spend. Which of the following is the best backpack for Lucy?

| #1 | #2 | #3 | |
|--|-----------------------------------|-----------------------------------|--|
| Deuter ACT Lite 60 +10 SL Pack | Osprey Aura 65 AG Pack | REI Co-op Traverse 65 Pack | |
| Price: \$209.00 | Price: \$230.00 | Price: \$249.00 | |
| Gear Capacity: 60 Liters/ 3,660 | Gear Capacity: 60 Liters/ 3,661 | • Gear Capacity: 61 Liters/ 3,722 | |
| cubic inches | cubic inches | cubic inches | |
| • Weight: 3lbs. 14 oz. | • Weight: 3lbs. 16 oz. | • Weight: 4lbs. 4 oz. | |
| • Fits torso: 14-20 inches | • Fits torso: 14-17 inches | • Fits torso: 15-17 inches | |
| • Fits Waist/Hips: 26-32 inches | • Fits Waist/Hips: 24-45 inches | • Fits Waist/Hips: 26-36 inches | |
| Material: Nylon | Material: Nylon | Material: Ripstop Nylon | |
| Number of Exterior Pockets:6 + | • Number of Exterior Pockets: 9 + | • Number of Exterior Pockets: 9 + | |
| main compartment | main compartment | main compartment | |
| Rain Cover: NO | • Rain Cover: NO | Rain Cover: YES | |



Junior/Intermediate Class #3 - Active Wear

You offer to help Cindy purchase a workout shirt for her dad's birthday. Cindy's dad jogs, bikes and works out, so she wants to get him a shirt that has good wicking ability, provides freedom of movement, and offers sun protection since many of his activities are outside. Cindy has \$30 to spend on the shirt. Of the options Cindy is considering, which one will work best for her dad?

| | #2 | #3 | 1 |
|--|---|---|---|
| Adidas Baselayer Climacool UPF | Champion Cotton Shirt | Defender Quick Dry Compression | |
| Long-sleeve Crew Top | | Shirt | |
| Price: \$29.99 | Price: \$11.94 | Price: \$14.89 | |
| 92% polyester/8% Spandex Climacool Ultra Tech base layer delivers breathability Tapered athletic fit looks good and gives you freedom of movement Moisture management to keep you dry Tagless construction and smooth stitching deliver superior comfort 25+ UPF protection | 100% cotton Lightweight, comfortable cotton jersey fabric Athletic fit for comfort Tag-free ribbed crewneck keeps its shape Neck taping and double-stitched sleeves and hem to enhance overall durability | 92% polyester/8% Spandex Smooth and ultra-soft fabric provides extreme comfort with very little weight without restriction Quick and Dry Transport System wicks sweat away from the body, keeping you cooler and drier Cool in summer and heat retention in winter Compression fit bolsters muscle support and increases circulation 30 UPF protection | |

#4



Under Armour Long Sleeve T-shirt

Price: \$29.99

- 100% polyester
- UA Tech fabric is quick-drying, ultra soft and has a more natural feel
- Moisture Transport System wicks sweat and dries faster
- Anti-odor technology prevents the growth of odor causing microbes



REASONS

Junior/Intermediate Class #4 – Fast Food

Jane wants to get in shape for soccer, and has decided to start eating healthier. While she eats most of her meals at home, today she forgot to make her lunch ahead of time before practice. Jane will need to stop and get fast food before going to practice. She needs plenty of protein to keep her full and give her energy while playing, but wants to stick to 550 calories or less with as little fat as possible. Which option below would provide Jane with the healthiest choice that is low in fat and calories and high in protein?

| | #1 | #2 | #3 |
|-----------|---|--|----------------------------|
| | McDonald's Quarter Pounder with Cheese | Chick-Fil-A Grilled Chicken Cool Wrap | Taco Bell Fiesta Taco Sala |
| Cost: | \$3.40 | \$5.85 | \$5.39 |
| Calories: | | 350 Calories | 760 Calories |
| Fat: | 27g Fat | 14 g | 39 g |
| Protein: | 31g Protein | 37g | 27 g |

REASONS



Junior/Intermediate Class #5 - Athletic Shoes

Clara is a marathon walker and needs a pair of walking shoes. Her budget only allows for a \$50 purchase. She wants a dark colored shoe because she does have to walk on dirt roads and it rains a lot where she lives. Please help her find a walking shoe to wear.

| | #1 | #2 | #3 |
|-----------|---|--|--|
| | Ryn | | |
| Price | \$45.99 | \$49.99 | \$14.99 |
| Weight | 7.5 oz | 10 oz | 10.2 oz |
| Color | Brown/Turquoise | Black/Red | White |
| Features: | Breathable mesh uppers with leather overlays Rubber outsoles for secure traction Lightweight molded EVA midsoles with TPU midfoot shanks Memory foam insoles add cushioned comfort | Mesh and synthetic leather uppers for breathability and comfortable wear C.M.E.V.A. midsoles Rearfoot GEL[®] Cushioning System attenuates shock during impact and toe-off phases AHAR[®] in critical areas of the outsoles provide durability | Leather and mesh uppers create a stylish look Molded, removable Revitasoles with JoltJel heel inserts help provide comfortable wear, even during a long workout Compression-molded EVA midsoles for durability |



Junior/Intermediate Class #6 – Mystery – Activity Trackers

Melissa is a sophomore in the Food & Nutrition and Health & Fitness projects. She already keeps track of her meals and exercise routines using apps on her Apple iPhone, but she needs to get an accurate count of her physical activity for her 4-H project portfolio. Melissa needs accurate results for her records and to share with others. She needs it to pair with her phone and wants to be able to track calories burned, steps taken, and total distance during both daily activity and various workouts. Her main goal is to get a complete, overall view of her physical activity throughout each day. Her budget is \$150.

| | #1 | #2 | #3 | #4 |
|------------------------------|---|---|---|--|
| | Garmin - Vivosmart HR Activity | Samsung - Gear Fit2 Fitness Watch + | Fitbit - Flex 2 Activity Tracker | Omron- USB Online Pedometer |
| | Tracker + Heart Rate | Heart Rate | | |
| Cost: | \$149.99 | \$179.99 | \$99.95 | \$27.99 |
| Device Measures or Monitors | Heart rate Calories burned Distance traveled Steps taken | Heart rate Calories burned Distance traveled Steps taken Speed | All-day activity Heart rate Steps taken Distance traveled Calories burned Active minutes Track sleep (hours slept) | Steps taken Aerobic steps Calories burned Distance traveled Steps per minute |
| Phone & Computer Functions | Compatible with smartphones: Apple iOS Android Get alerts: emails, texts | Compatible with smartphones: Galaxy S7 Most Android smartphones Receive alerts: emails, text; respond to calls | Compatible with smartphones and tablets: • Apple iOS • Android Receive alerts: emails, text | Connects via USB to personal computer |
| Tracking & Physical Features | LCD Display • Easy to read in sunlight • Easy to receive alerts Water resistant | Auto & Multi Sport Tracking Automatically recognizes what activity you're doing (running, cycling, elliptical, etc.) 1.5" Super AMOLED display Curved display Full color Easy to read in sun or shade Built in GPS Standalone Music Player Dust & water resistant | Auto exercise recognition SmartTrack[™] automatic exercise recognition to detect activities Water proof Use in pool, shower, and ocean Tracks laps and duration in pool Ultra-thin Removable tracker Interchangeable accessories for stylish wear | Counts steps from a variety of attachment points on body Long-term memory • Up to 7 days of information can be display on screen |

Senior Class #1 – Cookware

Taylor is moving into her first apartment to attend a four-year university. She needs a durable, easy to care for cookware set that will last. She would like to purchase cookware that will perform well with even heating. Her budget is \$180.00. Which product should she buy?

| #1 | #2 | #3 |
|--|--|---|
| T-fal Ultimate Stainless Steel Copper-Bottom Heavy Gauge Multi-Layer Base Cookware Set, 13-Piece, Silver | ExcelSteel 546 Professional 8- Piece Triply Cookware Set with Stainless Steel Cast Handles and Knobs, Copper Exterior | Chef's Star Professional Grade Stainless Steel 17 Piece Cookware Set with Impact- bonded Technology |
| Price: \$159.82 | Price: \$179.99 | Price: \$259.99 |
| 8-inch and 10.5-inch fry pans 12" covered fry pan 1, 2, and 3-quart covered sauce pans 5-quart covered Dutch Oven stainless-steel steamer basket | 1.5 and 3.25 Quart covered sauce pans 5.5 Quart covered Dutch Oven 9.5" fry pan | 1.6 and 2.5 Quart Saucepans with lids 4.2 Quart Casserole w/ Lid 8.6 Quart Stock Pot w/ Lid 8" and 9.5" Frying Pans 11" 5.5 Quart Sauté Pan w/ Lid 9.5" Boiler Basket 9.5" Steamer Basket Spoon, 2 Prong Fork, Slotted Spatula |



Senior Class #2 - Outdoor Backpacks

Lucy, who is very active outdoors, is going on a backpacking trip (4 days, 3 nights). She will be traveling with some friends through parts of the Appalachian Mountains. She needs a backpack that is lightweight, but has plenty of space for all her stuff (water, sleeping bag, clothes, etc.). She would like the backpack to have a rain cover and outside compartments. Her waist size is a 30 and torso size is 16 inches. She has \$250 to spend. Which of the following is the best backpack for Lucy?

| #1 | #2 #3 | | |
|-----------------------------------|-----------------------------------|-----------------------------------|--|
| Deuter ACT Lite 60 +10 SL Pack | Osprey Aura 65 AG Pack | REI Co-op Traverse 65 Pack | |
| Price: \$209.00 | Price: \$230.00 | Price: \$249.00 | |
| • Gear Capacity: 60 Liters/ 3,660 | • Gear Capacity: 60 Liters/ 3,661 | • Gear Capacity: 61 Liters/ 3,722 | |
| cubic inches | cubic inches | cubic inches | |
| • Weight: 3lbs. 14 oz. | • Weight: 3lbs. 16 oz. | • Weight: 4lbs. 4 oz. | |
| • Fits torso: 14-20 inches | • Fits torso: 14-17 inches | • Fits torso: 15-17 inches | |
| • Fits Waist/Hips: 26-32 inches | • Fits Waist/Hips: 24-45 inches | • Fits Waist/Hips: 26-36 inches | |
| Material: Nylon | Material: Nylon | Material: Ripstop Nylon | |
| • Number of Exterior Pockets:6 + | • Number of Exterior Pockets: 9 + | • Number of Exterior Pockets: 9 + | |
| main compartment | main compartment | main compartment | |
| • Rain Cover: NO | Rain Cover: NO | Rain Cover: YES | |

#4



Kelty Redwing 40 Pack Price: \$211.73

- Gear Capacity: 39 Liters/ 1,953 cubic inches
- Weight: 2lbs. 10 oz.
- Fits torso: 14-18 inches
- Fits Waist/Hips: 27-32 inches
- Material: 420-denier polyester
- Number of Exterior Pockets: 4
 + main compartment
- Rain Cover: YES

Senior Class #3 - Active Wear

You offer to help Cindy purchase a workout shirt for her dad's birthday. Cindy's dad jogs, bikes and works out, so she wants to get him a shirt that has good wicking ability, provides freedom of movement, and offers sun protection since many of his activities are outside. Cindy has \$30 to spend on the shirt. Of the options Cindy is considering, which one will work best for her dad?

| | #2 | #3 | # |
|--|---|---|---|
| Adidas Baselayer Climacool UPF Long-sleeve Crew Top | Champion Cotton Shirt | Defender Quick Dry Compression Shirt | |
| Price: \$29.99 | Price: \$11.94 | Price: \$14.89 | Ī |
| 92% polyester/8% Spandex Climacool Ultra Tech base layer delivers breathability Tapered athletic fit looks good and gives you freedom of movement Moisture management to keep you dry Tagless construction and smooth stitching deliver superior comfort 25+ UPF protection | 100% cotton Lightweight, comfortable cotton jersey fabric Athletic fit for comfort Tag-free ribbed crewneck keeps its shape Neck taping and double-stitched sleeves and hem to enhance overall durability | 92% polyester/8% Spandex Smooth and ultra-soft fabric provides extreme comfort with very little weight without restriction Quick and Dry Transport System wicks sweat away from the body, keeping you cooler and drier Cool in summer and heat retention in winter Compression fit bolsters muscle support and increases circulation 30 UPF protection | |

#4



Under Armour Long Sleeve Tshirt

Price: \$29.99

- 100% polyester
- UA Tech fabric is quick-drying, ultra soft and has a more natural feel
- Moisture Transport System wicks sweat and dries faster
- Anti-odor technology prevents the growth of odor causing microbes





Senior Class #4 – Fast Food

Adam and his sister Alicia are driving to meet their family at their cousin's wedding 3 hours away. They don't have much time to stop and eat, so they will need to pick up fast food that can be eaten in the car on their way. Adam and Alicia only have \$20 to spend, and would like to stay as close to 550 calories as possible, with the most protein and least amount of fat possible. Which fast food choice would be the best option for Adam and Alicia, based on their budget and their nutritional needs?

| | #1 | #2 | #3 | #4 |
|-----------|---|--|--------------------------------------|--|
| | | | | |
| | McDonald's Quarter Pounder with Cheese | Schlotzsky's The Original- Small Sandwich | Whataburger Whatachick'n Sandwich | Chick-Fil-A Grilled Chicken Cool Wrap |
| Cost: | \$3.40 | \$5.20 | \$6.24 | \$5.85 |
| Calories: | 540 Calories | 740 Calories | 560 Calories | 350 Calories |
| Fat: | 27g Fat | 39g Fat | 22g Fat | 14 g Fat |
| Protein: | 31g Protein | 40g Protein | 30g Protein | 37g Protein |

REASONS

REASONS

REASONS

Senior Class #5 – Athletic Shoes

Clara is a marathon walker and needs a pair of walking shoes. Her budget only allows for a \$50 purchase. She wants only a dark colored shoe because she does have to walk on dirt roads and it rains a lot where she lives. Please help her find a walking shoe to wear.

| | #1 | #2 | #3 | #4 |
|-----------|---|--|--|---|
| | rydo | | | |
| Price | \$32.99 | \$29.99 | \$14.99 | \$49.99 |
| Weight | 7.0 oz | 8 oz | 10.2 oz | 9.5 oz |
| Color | Brown/turquoise | Black/Red | White | Brown |
| Features: | Women's Walking Shoe Breathable mesh uppers with leather overlays Rubber outsoles for secure traction Lightweight molded EVA midsoles with TPU midfoot shanks Memory foam insoles add cushioned comfort | Women's Walking Shoe Mesh and synthetic leather uppers for breathability and comfortable wear C.M.E.V.A. midsoles Rearfoot GEL[®] Cushioning System attenuates shock during impact and toe-off phases AHAR[®] in critical areas of the outsoles provide durability | Women's Walking Shoe Leather and mesh uppers create a stylish look Molded, removable Revitasoles with JoltJel heel inserts help provide comfortable wear, even during a long workout Compression-molded EVA midsoles for durability | New Balance Men's 659 Fitness Walking Shoes Synthetic and mesh uppers are lightweight and comfortable C-CAP® EVA midsoles offer cushioning and support Walking Strike Path® tread pattern on the outsoles helps stabilize feet through the natural gait cycle ABZORB® cushioning in the midfeet provides shock absorption Reflective detailing helps enhance visibility in low- light conditions |

REASONS

Senior Class #6 – Mystery – Tablets

Grace and her 4-H agent applied for a STEM (Science, Technology, Engineering, & Math) grant to purchase to support their local 4-H Robotics clubs. They received \$1,500 from the grant to purchase tablets for use during meetings. They must purchase at least 4 tablets. The tablets will need to be able to run apps to control the robots once they are built. Since they will be used by multiple clubs through the day, the tablets need to have a battery life of at least 7 hours. They need to by lightweight for easy transportation and use. Grace plans to have the robotics team members film video while in action, so a rear-facing camera is ideal. Since the video files can become large, there needs to be sufficient memory to hold all the videos.

| | #1 | #2 | #3 | #4 |
|------------------------|----------------|--------------------------------|-----------------------|-----------------------|
| | | EAMERING 122-45 - Star Soc. | | |
| | nabi 2 Kids | Samsung | Apple iPad Pro | Acer Iconia |
| | tablet | Galaxy Tab A | | One 8 |
| Price | \$199.99 | \$229.99 | \$799.99 | \$149.99 |
| Internal Capacity | 8 GB | 16 GB | 32 GB | 16 GB |
| Processor Chip | NVIDIA | Quad Core | A9x chip with 64- | Quad Core |
| | 1.30 GHz | 1.20 GHz | bit architecture | 1.33 GHz |
| | | | and M9 motion | |
| | | | coprocessor | |
| Product | 10.10"(L) x | 8.20"(L) x | 12.00"(L) x | 8.50"(L) x |
| Dimensions | 7.10"(W) x | 5.43"(W) x | 8.68"(W) x | 5.10"(W) x |
| E C t | 3.20"(H) | 0.29"(H) | 0.27"(H) | 0.30"(H) |
| Front-facing | Yes; | Yes; | Yes; | Yes; |
| camera Degra facing | 3.0 megapixels | 2.0 megapixels | 1.2 megapixels | 0.3 megapixels |
| Rear-facing | No | Yes; | Yes; | Yes; |
| camera | Yes | 5.0 megapixels Yes | 8.0 megapixels Yes | 5.0 megapixels Yes |
| Apps Available | | | | |
| Battery life | 7.42 hours | 13.00 hours | 10.00 hours | 7.00 hours |
| Weight | 1.30 lbs. | 0.690 lbs. | 1.570 lbs. | 0.950 lbs. |
| Screen Size | 7.0" | 8.0" | 12.9" | 8.0" |
| Screen Resolution | 1024 x 600 | 1024 x 768 | 2732 X 2048 | 1280 x 800 |
| Keyboard Included | No | No | No | No |
| Headphone jack | Yes | Yes | Yes | Yes |
| Operating System | Android 4.0 | Android 5.0 | iOS9 | Android 4.4 |
| Accelerometer | Yes | Yes | Yes | Yes |
| Bluetooth | Yes | Yes | Yes | Yes |
| | | | | |
| Wi-Fi | Yes | Yes | Yes | Yes |



2017 District 8 4-H Consumer Decision Making Judging Contest Official Placings & Cuts

| Jui | Junior/Intermediate | | | | | | |
|-----|-----------------------------|----------|-------|---------|--|--|--|
| # | Name | Official | Cuts | | | | |
| 1 | Cookware | 2-1-4-3 | 2-2-5 | | | | |
| 2 | Outdoor Backpacks | 3-2-1-4 | 2-1-3 | | | | |
| 3 | Active Wear | 3-1-4-2 | 1-2-3 | | | | |
| 4 | Fast Food | 2-4-1-3 | 2-4-5 | Reasons | | | |
| 5 | Athletic Shoes | 1-2-3-4 | 1-4-5 | | | | |
| 6 | Mystery – Activity Trackers | 3-1-4-2 | 2-4-4 | | | | |

| Se | Senior | | | | | | |
|----|-------------------|----------|-------|---------|--|--|--|
| # | Name | Official | Cuts | | | | |
| 1 | Cookware | 1-2-4-3 | 2-3-5 | | | | |
| 2 | Outdoor Backpacks | 3-2-1-4 | 2-1-3 | | | | |
| 3 | Active Wear | 3-1-4-2 | 1-2-3 | | | | |
| 4 | Fast Food | 4-1-3-2 | 4-1-4 | Reasons | | | |
| 5 | Athletic Shoes | 1-2-4-3 | 1-3-1 | Reasons | | | |
| 6 | Mystery – Tablets | 2-4-1-3 | 2-4-3 | | | | |



Class #1 – Cookware

 Placing:
 2-1-4-3

 Cuts:
 2-2-5

Reasoning:

In the top pair, I placed 2 over 1 because:

- 2 is heavy weight aluminum so will be easy to maintain
- 2 has a lifetime warranty
- 2 is non-stick so it will be easy to clean

Grants to 1

- 1 is heavy stainless with a copper bottom for even heating
- 1 is heavy and durable

In the middle pair, I placed 1 over 4 because:

- 1 is made of heavy stainless so it will be durable
- 1 has a copper bottom for even heating
- 1 is dishwasher safe so it will be easier to clean
- 1 has utensils included

Grants to 4

- 4 is much less expensive (within budget)
- 4 has more pieces

In the bottom pair, I placed 4 over 3 because:

- 4 is much less expensive
- 4 is non-stick so it will be easier to clean
- 4 is not as durable

Grants to 3

- 3 has more pieces
- 3 is heavier material (stainless steel) so it will be more durable

I placed 3 last because:

• 3 is over budget

Class #2 – Outdoor Backpacks

Placing: 3-2-1-4 Cuts: 2-1-3

Reasoning:

I placed this class of outdoor backpacks 3-2-1-4.

The top pair easily starts with #3, the REI Traverse 65 pack. It has all the capacity that Lucy needs as well as 9 extra pockets for storage. It also offers the rain cover that Lucy wants. #2, the Traverse 65, also fits Lucy's size and has everything needed for Lucy to have a great trip.

I grant that 2 is less expensive and lighter weight than 3; however it offers no rain cover.

In a close middle pair, #2, Osprey Aura 65 pack, has the advantage with more exterior pocket than #1, the Deuter ACT Lite.

I can grant that #1 is less expensive.

In the bottom pair, you can easily place #1 over #4. The Deuter ACT Lite is pack has greater storage and more exterior pockets.

I can grant that #4 has a rain cover.

#4, the Kelty Redwing 40 pack places last. Although the lightest in the class, it has the smallest in capacity and would not work on a multi-day trip. The Kelty Redwing is a nice pack for day trip but, is just not useful for Lucy during this long trip.

Class #3 – Active Wear

Placing: 3-1-4-2

Cuts: 1-2-3

Reasoning:

In a <u>close</u> top pair, I placed 3 over 1 because:

- 1 is meant as a baselayer
- Higher UPF protection
- Can purchase 2 of #3 as compared to 1 of #1 (3 is half the cost of 1)

Grants to 1

• Also offers UPF protection of 25+

In the middle pair, I placed 1 over 4 because:

- 1 has Spandex to allow for freedom of movement
- 1 offers UPF protection whereas 4 does not

In the bottom pair, I placed 4 over 2 because:

• 4 is made of polyester which will be better for moisture wicking

Grants to 2

• Is the least expensive option

I placed 2 last because:

- Cotton will not wick sweat away like other fabrics
- Does not offer UPF protection

Class #4 – Fast Food - REASONS

Placing: 2-4-1-3

Cuts: 2-4-5

Reasoning:

In the top pair, I placed #2 over #4 because:

- #2 has 100 fewer calories than #4
- #2 is 1g lower in fat than #4
- #2 has the second highest amount of protein, at 37g
- #2 is less expensive than 4

Grants to #4

• #4 is 3g higher in protein than #2

In the middle pair, I placed #4 over #1 because:

- #4 is lower in calories than #1
- #4 is considerably lower in fat than #1
- #4 is higher in protein than #1

Grants to #1

• #1 is less expensive than #4

In the bottom pair, I placed 1 over 3 because:

- #1 has more than 200 fewer calories than #3
- #1 has 12g less fat than #3
- #1 has 4g more protein than #3

I placed 3 last because:

- #3 by far has the highest amount of calories, and is over the recommended amount of calories
- #3 has the highest amount of fat out of all of the choices
- #3 has the lowest amount of protein out of all the choices

Class #5 – Athletic Shoes

Placing: 1-2-3-4

Cuts: 1-4-5

Reasoning:

In a close top pair, I placed 1 over 2 because:

- Less expensive than 2
- Weighs less than 2

In the middle pair, I placed 2 over 3 because:

- It is slightly less in weight (8oz vs 10.2 oz)
- It is black/red and she wanted a dark colored shoe

Grant to 3

• 3 is considerably less expensive than 2

In the bottom pair, I placed 3 over 4 because:

- It is the least expensive pair of shoes (\$14.99) and within budget
- It is a women's shoe

Grant to 4

• 4 was brown which was more desirable for walking on dirt roads and in the rain

I placed 4 last because:

- It is a men's shoe
- It is over the price range (\$59.99 and price limit was \$50)

Class #6 – Mystery – Activity Trackers

Placing: 3-1-4-2 Cuts: 2-4-4

Reasoning:

In the top pair, I placed 3 over 1 because:

This class had an easy top pair. #3 gives Melissa the most cost effective option. It tracks her daily activity, workouts, and even her sleep activity. Information like this can really help Melissa get accurate data to assess her overall health. This product also works with her Apple iPhone.

In the middle pair, I placed 1 over 4 because:

I grant that #1 does many of the same things as #3, but there are two main differences. #1 is more expensive than #3. #1 also does have as many health-tracking features like measuring Melissa's sleep activity or automatic ability to recognize and track activities. It also works with her Apple iPhone.

In the bottom pair, I placed 4 over 2 because:

#4 placed over #2 due to price and its ease of use. Even though it is not a smart device, it still can be used as a pedometer. It does not connect with her phone, but, unlike #2, she could still use #4 regardless of this fact. The USB plug would allow Melissa to upload the data to a computer for easy tracking, a feature not expressly listed by #2.

I placed 2 last because:

#2 placed last in the group because it is not compatible with her Apple iPhone at all and is over her budget of \$150. Purchasing #2 would require Melissa to buy a brand new mobile device just to use some of the features. This would not be a wise investment. The product description clearly states that it only works with Android systems. I grant that it has additional features of GPS and a music player, but these features are not necessary to meet her tracking needs.

Class #1 – Cookware

Placing: 1-2-4-3

Cuts: 2-3-5

Reasoning:

In the top pair, I placed 1 over 2 because:

- 1 less expensive
- 1 has more pieces
- 1 would be less maintenance than the all copper set

Grants to 2

• It is all copper exterior for more even heating

In the middle pair, I placed 2 over 4 because:

- 2 is heavier and will be more durable
- 2 has the copper exterior for more even heating
- 2 has cast steel handles and knobs making it easier to handle when hot

Grants to 4

- 4 has more pieces
- 4 is considerably less expensive

In the bottom pair, I placed 4 over 3 because:

- 4 is well within Taylor's budget
- 4 is very easy to maintain

Grants to 3

- 3 is very heavy weight steel
- 3 has the most pieces including utensils

I placed 3 last because:

- 3 is over budget
- 3 has more pieces than Taylor may need

Class #2 – Outdoor Backpacks

Placing: 3-2-1-4 Cuts: 2-1-3

Reasoning:

I placed this class of outdoor backpacks 3-2-1-4.

The top pair easily starts with #3, the REI Traverse 65 pack. It has all the capacity that Lucy needs as well as 9 extra pockets for storage. It also offers the rain cover that Lucy wants. #2, the Traverse 65, also fits Lucy's size and has everything needed for Lucy to have a great trip.

I grant that 2 is less expensive and lighter weight than 3; however it offers no rain cover.

In a close middle pair, #2, Osprey Aura 65 pack, has the advantage with more exterior pocket than #1, the Deuter ACT Lite.

I can grant that #1 is less expensive.

In the bottom pair, you can easily place #1 over #4. The Deuter ACT Lite is pack has greater storage and more exterior pockets.

I can grant that #4 has a rain cover.

#4, the Kelty Redwing 40 pack places last. Although the lightest in the class, it has the smallest in capacity and would not work on a multi-day trip. The Kelty Redwing is a nice pack for day trip but, is just not useful for Lucy during this long trip.

Class #3 – Active Wear

Placing: 3-1-4-2

Cuts: 1-2-3

Reasoning:

In a <u>close</u> top pair, I placed 3 over 1 because:

- 1 is meant as a baselayer
- Higher UPF protection
- Can purchase 2 of #3 as compared to 1 of #1 (3 is half the cost of 1)

Grants to 1

• Also offers UPF protection of 25+

In the middle pair, I placed 1 over 4 because:

- 1 has Spandex to allow for freedom of movement
- 1 offers UPF protection whereas 4 does not

In the bottom pair, I placed 4 over 2 because:

• 4 is made of polyester which will be better for moisture wicking

Grants to 2

• Is the least expensive option

I placed 2 last because:

- Cotton will not wick sweat away like other fabrics
- Does not offer UPF protection

Class #4 – Fast Food - REASONS

Placing: 4-1-3-2

Cuts: 4-1-4

Reasoning:

In the top pair, I placed #4 over #1 because:

- #4 meets all the criteria (less than 550 calories, high in protein, low fat, within budget)
- #4 is the lowest in calories
- #4 has 6g more protein than #1
- #4 is 13g lower in fat than #1

Grants to 1

• #1 is below the recommended amount of calories (550), and does have a good amount of protein and the second lowest amount of fat.

In a close middle pair, I placed #1 over #3 because:

- #1 has 1g more protein than #3
- #1 has slightly fewer calories than #3
- #1 is less expensive than #3

Grants to #3

• #3 has 5 grams less fat

In the bottom pair, I placed #3 over #2 because:

- #3 has 180 fewer calories than #2
- #3 has 17g less fat than #2

Grants to 2

• #2 does have the greatest amount of protein (40g) of any of the choices

I placed 2 last because:

- #2 by far has the most calories of any of the options, and does not fit the recommended calorie amount
- #2 is much higher in fat than all of the other options

Class #5 – Athletic Shoes - REASONS

Placing: 1-2-4-3

Cuts: 1-3-1

Reasoning:

In the top pair, I placed 1 over 2 because:

- Weighs less than 2
- It is brown and will hide dirt better

Grant to 2

• 2 is less expensive

In the middle pair, I placed 2 over 4 because:

- It is less in weight (8oz vs 9.5 oz)
- It was a women's walking shoe
- It was less expensive than 4 (\$29.99 vs \$49.99)

Grant to 4

• The shoe is brown which is better for dirt roads and possibility of being in the rain.

In the bottom pair, I placed 4 over 3 because:

- Weighs less than 3 (9.5 oz vs 10.2 oz)
- Brown shoe

Grant to 3

- 3 was a women's shoe
- 2 was much less expensive

I placed 3 last because:

- It was a white shoe
- It weighed the most (10.2 oz)

<u>Class #6 – Mystery – Tablets</u>

Placing: 2-4-1-3

Cuts: 2-4-3

Reasoning:

In the top pair, I placed 2 over 4 because:

Since the STEM grant was only for \$1,500, Grace and her 4-H agent must be mindful of their budget. (They cannot spend more than \$375 per tablet.) While Tablet #2 may seem similar to Tablet #4 due to the exact same screen size and internal storage capacity of 16 GB and both with rear-facing cameras, Tablet #2 places at the top of the class. Tablet #2 has a battery life of 13 hours—almost twice the minimum battery life required by Grace and her agent to provide all-day use in the classrooms with their 4-H Robotics Clubs. It is also the lightest weight tablet in the class.

Grant to 4:

Tablet #4 has the same quality of rear-facing camera as Tablet #2, but its battery life is not as long. It has slightly larger overall dimensions and is a little heavier than Tablet #2.

In the middle pair, I placed 4 over 1 because:

Tablet #4 clearly placed over Table #1 due to affordability and a larger internal storage capacity. It also has a better screen resolution and a faster processor than Tablet #1.

In the bottom pair, I placed 1 over 3 because:

Tablet #1 placed third in the class because it still worked within the budget of Grace and her agent. I fault that Tablet #1 does not have a rear-facing camera, but its front-facing camera is higher quality than that of Tablet #3. With a battery life just over 7 hours, Tablet #1 would still meet their criteria. Even though Tablet #1 has the smallest internal storage capacity of the class, it would still be sufficient for the needs of the 4-H Robotics Club.

I placed 3 last because:

I grant that Tablet #3 does have the largest internal storage capacity and the highest quality rear-facing camera which would aid the youth in filming and storing their videos. However, Grace and her agent must purchase at least 4 tablets for the students to share in the classrooms. And Tablet #3's price of \$799.99 instantly puts it at the bottom of the class. Tablet #3 is completely outside of Grace's budget. It also places at the bottom of the class due to being the heaviest of the 4 tablets, which may make transportation more difficult.