

Source Notes:

This lab was modeled after common vector mapping activities.

The Magic Kingdom Park map from the Walt Disney World site.

Original Lab -

Jim Haine - Wissahickon High School, Ambler PA.

1997(?)

Modified 2010

Teacher Notes:

Modifications:

Any park map or vacation spot could be used. The students seem to enjoy thinking about going to Disney World.

Vector Lab – The Vacation Trip

Step 1. Locate and label 6 rides or attractions on the map (including the gate).

Step 2. Enjoy a day at the park, starting at the gate, and going in straight lines from one point to the next until it is time to go home. Use arrows to show the direction of travel (a small arrow head at the end of the line).

Step 3. Using a protractor and a ruler, find out the direction and magnitude for each of these arrows. The directions should always be compared to the paper so that 0° will be to the right, 90° will be up, 180° will be to the left and 270° will be down.

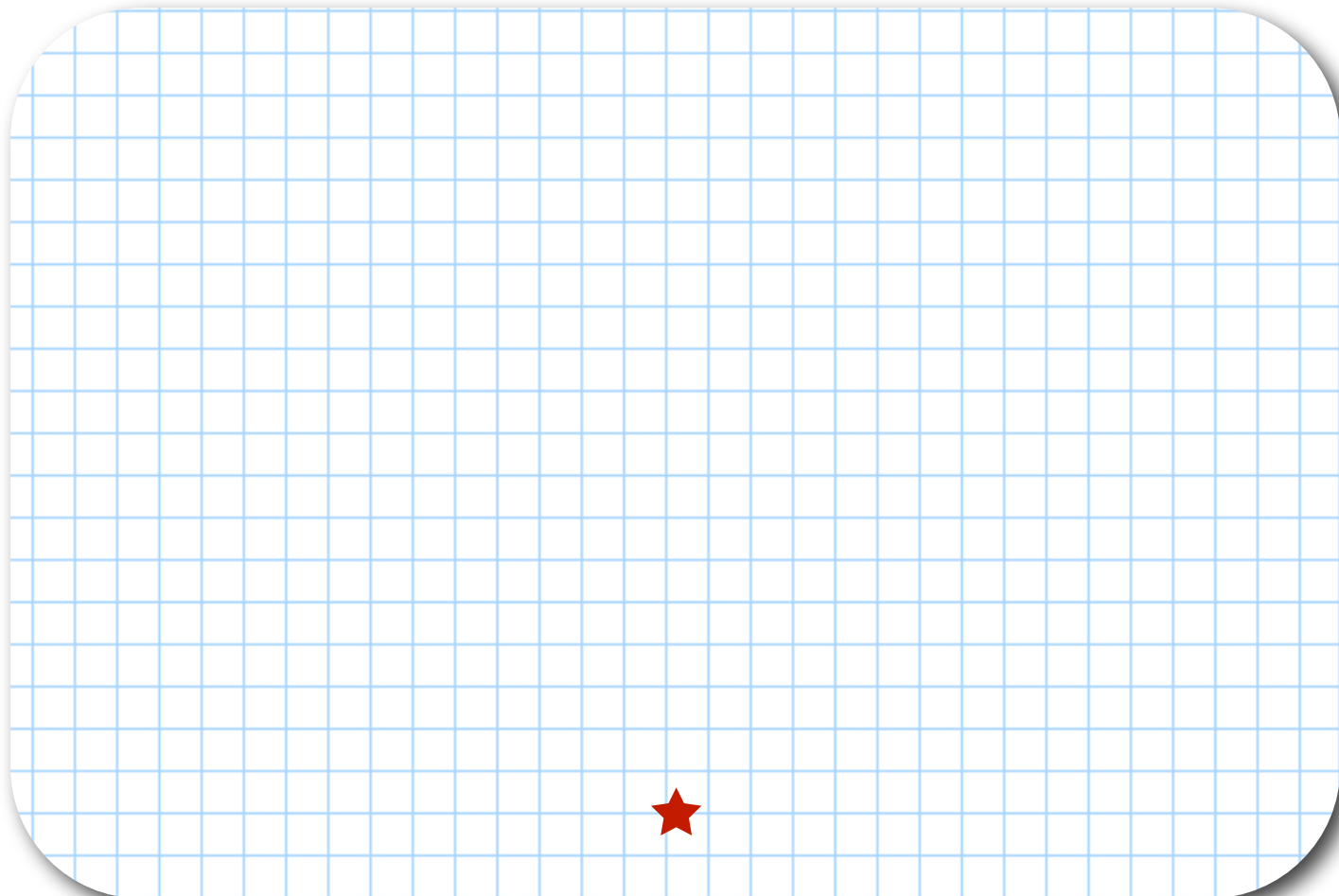
Step 4. Name those vectors and place their measurements below.



Step 5. Using the information from the lines above, draw a head to tail addition of the vectors below. Use a scale so that 1 cm on the map = 0.5 cm on the page. Find, using the ruler and protractor, the resultant and the equilibrant.

R =

E =



Vector Maps - Graphic and Component Methods

Name _____

Step 6. Find the horizontal and vertical components of each of the 6 vectors. Watch negatives!

X components

Y components

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Step 7. Find the total x and total y of the resultant.

R_x _____ **R_y** _____

Step 8. Calculate the resultant and the equilibrant vectors.

R= _____

E= _____

Step 9. Conclusion

Compare and contrast the two methods of vector addition . Be sure to mention the simplicity and accuracy of each method.

Headliner Signage — The "magic" symbol signifies the availability of low-fat, low-calorie, low-sodium, low-fat dairy, low-fat frozen yogurt, and low-fat frozen yogurt. For special dietary needs, please ask for assistance at Guest Relations.

TABLE SERVICE

Priority seating suggested.

1 Tony's Town Square Restaurant — Salads, pastas, paninis, and specialty entrees served with an Italian flair. Serving breakfast, lunch and dinner.

2 The Plaza Restaurant — Deli sandwiches, burgers and salads. Lunch/dinner.

3 The Diamond Horseshoe Saloon Revue — Continental breakfast items, sandwiches, salads, hand-scooped ice cream, snacks, beverages.

4 Enchanted Grove — Lemonade sodas, strawberry swirl, juice.

5 Mrs. Potts' Cupboard — Soft-serve ice cream, floats, sundaes, shakes.

6 Auntie Granny's Galactic Goodies — Soft-serve ice cream, smoothies, fruit juices.

7 The Launching Pad at Rockettower Plaza — Snacks, smoked turkey legs, beverages.

8 Hook's Tavern — Snacks, beverages.

9 Cotti Italiano — Coffee, breakfast pastries.

10 Sunshrine Tree Terrace — Citrus specialties, non-fat frozen yogurt, cappuccino, espresso and beverages.

11 Frontstreet Knook — French fries and beverages. Served by one table.

12 Sleazy Hollow — Caramel corn prepared before your eyes, seasonal fresh fruit cobblers, freshly prepared baked goods, cappuccino, espresso, iced cappuccino, and shaved ice, beverages.

13 Sun's Landing — Shaved ice, beverages.

14 Townum Market — Fresh fruit, snacks and beverages.

15 Main Street Bake Shop — Cookies, pastries, cakes and confections. Served by one table.

16 Plaza Ice Cream Parlor — Served by one table.

17 Aloha Isle — Famous Dale Whipps. Served by one table.

18 Comic Day's Straight Cafe — Cheeseburgers (including vegetarian), rosé chicken, soups, sandwiches, and salads. Served by one table.

19 The Pizza Parlor — Pizza, deli sandwich, salad, fried chicken basket.

20 Casey's Corner — Hot dogs, fries and beverages. Served by one table.

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24 Mad Tea Party — The Many Adventures of Winnie the Pooh.

25 Peter Pan's Flight.

26 Dumbo the Flying Elephant.

27 It's a Small World.

28 Legend of the Lion King — Presented by one table.

29 Skyway to Tomorrowland (open 10:30am to 7pm).

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1 Liberty Tree Tavern — A la carte lunches include entrees, salads and sandwiches. Serving lunch and dinner.

2 Cinderella's Royal Table — Heavy and lighter fare fit for royalty. Serving lunch and dinner.

3 The Crystal Palace, A Buffet with Character — All-you-can-eat buffet with character visits. Serving breakfast, lunch and dinner.

4 Enchanted Grove — Lemonade sodas, strawberry swirl, juice.

5 Mrs. Potts' Cupboard — Soft-serve ice cream, floats, sundaes, shakes.

6 Auntie Granny's Galactic Goodies — Soft-serve ice cream, smoothies, fruit juices.

7 The Launching Pad at Rockettower Plaza — Snacks, smoked turkey legs, beverages.

8 Hook's Tavern — Snacks, beverages.

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11 Frontstreet Knook — French fries and beverages. Served by one table.

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