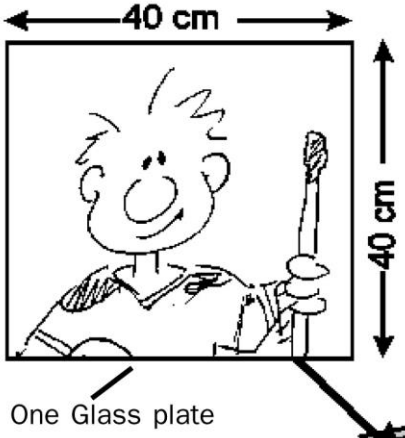
MATH

Sizing up the Wall of Fame

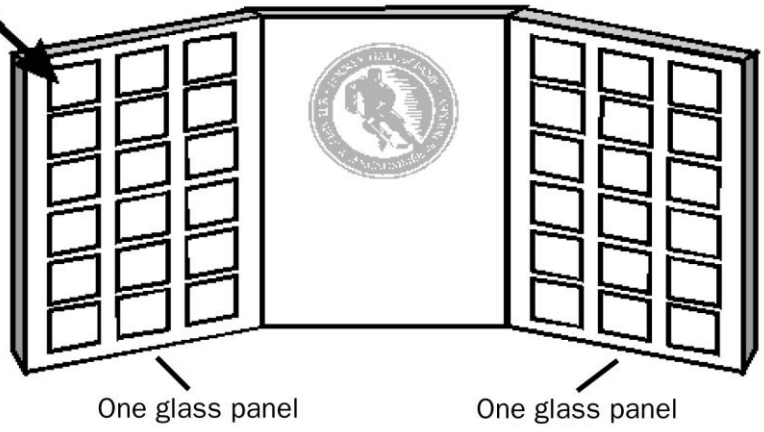
Hall Visit Activity:

Inside the Esso Great Hall are three series of glass panels holding glass plates with portraits and biographies of each and every Honoured Member of the Hockey Hall of Fame...



1. With these dimensions calculate the area of each glass plate.

_____
_____
_____
_____



2. Locate the portraits of the 2015 Inductees and calculate the total area of all 2015 glass plates.

_____
_____
_____
_____

Perimeter: Distance Around an Object

Classroom Activities:

Note: There are two sides to each wall. The Wall of Fame consists of one large structure and two smaller units.

1. A solid glass panel supports each glass plate (see picture on previous page). One glass panel has 3 glass plates across and 6 plates down. Assuming the glass plates are 40cm by 40cm, and that the plates fit snuggly in the glass panel, calculate the length and width of one glass panel.

   _____
   _____

2. The solid glass panel section is framed by a 10cm diameter metal bar about its perimeter. Calculate the length of metal bar required to fully support all of the glass panels. (Disregard the cross bars and curved end bars).

   _____
   _____

3. If the cost of the metal bar is $15.00 per metre, what is the total cost of the bar?

   _____

4. As the game continues to be played, new Honoured Members are inducted into the Hockey Hall of Fame.

   a) Calculate the total area of all the combined solid glass panels. There are 3 glass panels in total.

   _____

   b) Let's assume the total remaining area of unused glass plates is $20m^2$. If the current average is five new inductees per year, how many years will it be before the remaining glass plates are all used up? Remember all three units.

   _____
   _____

   c) If all the glass panels were filled with an Honoured Member glass plate, and each plate costs $450.00, what is the total cost of all the glass plates used?

   _____
   _____

GEOMETRY

Hall Visit Activity:

Geometry plays a crucial role in the game of hockey, but few people notice. There are face-off *circles*, square *box* formations used by hockey players to defend against power plays and even shots on goal taken from tough *angles*. Geometry plays a big role in the architecture of the Hockey Hall of Fame, but again, few people notice. In the Esso Great Hall, list places you can find the following shapes:

triangle circle square rectangle

Circles _____

_____

Triangles_____

_____

Squares _____

_____

Rectangles _____

_____

Using as many geometric figures as you can, design your own school team hockey logo or a new trophy.

Math Statistics and Graphs

Hall Visit Activity:

Two of hockey's greatest right wingers are the 'Rocket' (Maurice Richard), number nine for the Montreal Canadiens and 'Mr. Hockey' (Gordie Howe), number nine for the Detroit Red Wings. **Go to the computer terminals located in the Esso Great Hall** and compile their playing statistics for regular season and playoffs. Record each player's total goals, assists, points, penalty minutes and games played. Then, record the number of Hart Trophies (MVP) and the number of Stanley Cup championships won by each player.

Maurice Richard

	G	A	P	PIM	GP
Regular Season					
Playoffs					
Totals					
Hart Trophy wins _____			Stanley Cup wins ____		

Gordie Howe

	G	A	P	PIM	GP
Regular Season					
Playoffs					
Totals					
Hart Trophy wins _____			Stanley Cup wins ____		

Based on the above statistics, name two strengths exhibited by each player that would make both each a valuable team members.

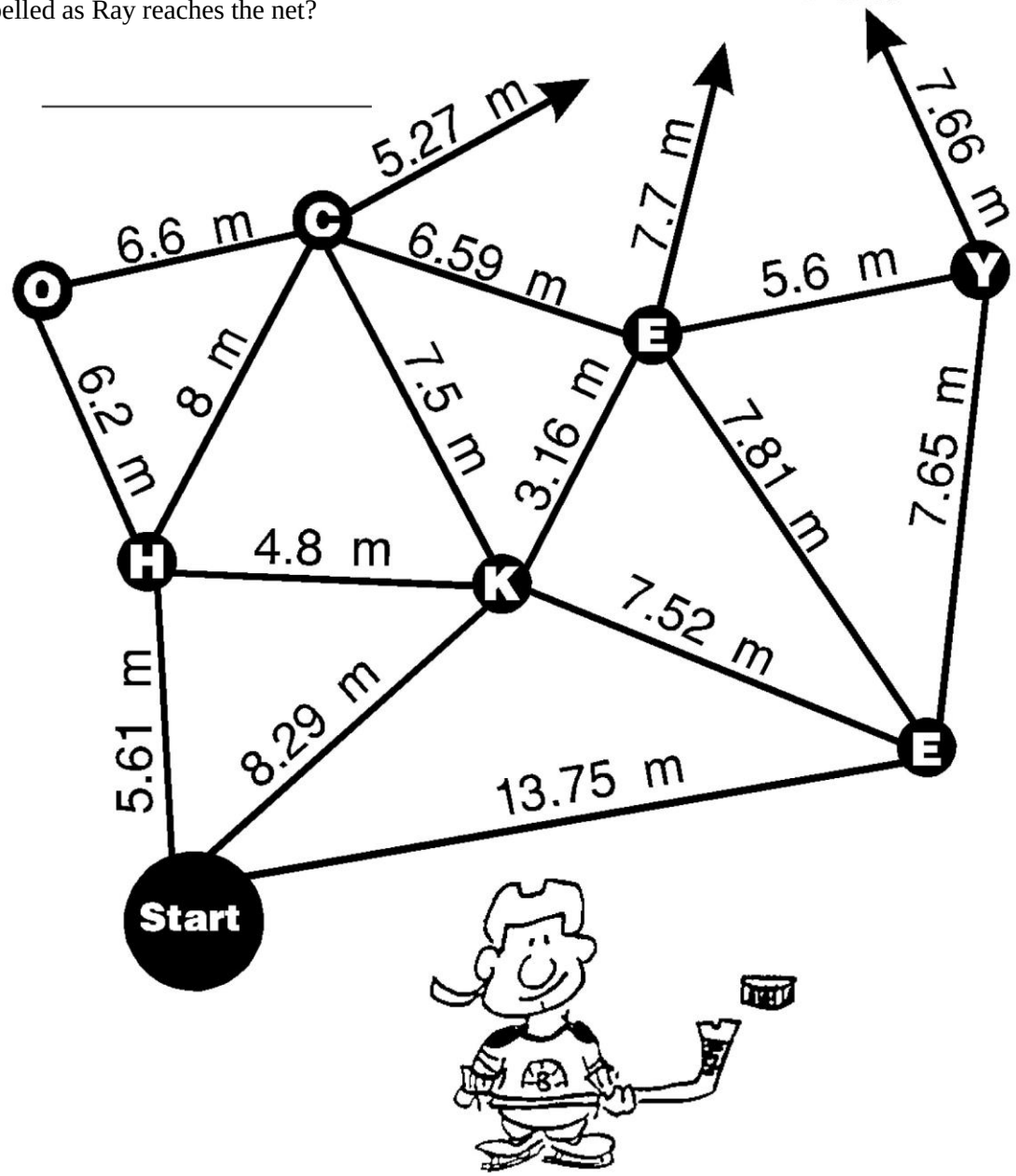
_____
_____
_____
_____

Ray's Rush

Classroom Activity:

Ray is rushing end-to-end in an attempt to score. While he skates up ice, each change in direction is marked by a letter. In this particular rush, he skates a little further each time before he changes direction. With this information, what word is spelled as Ray reaches the net?

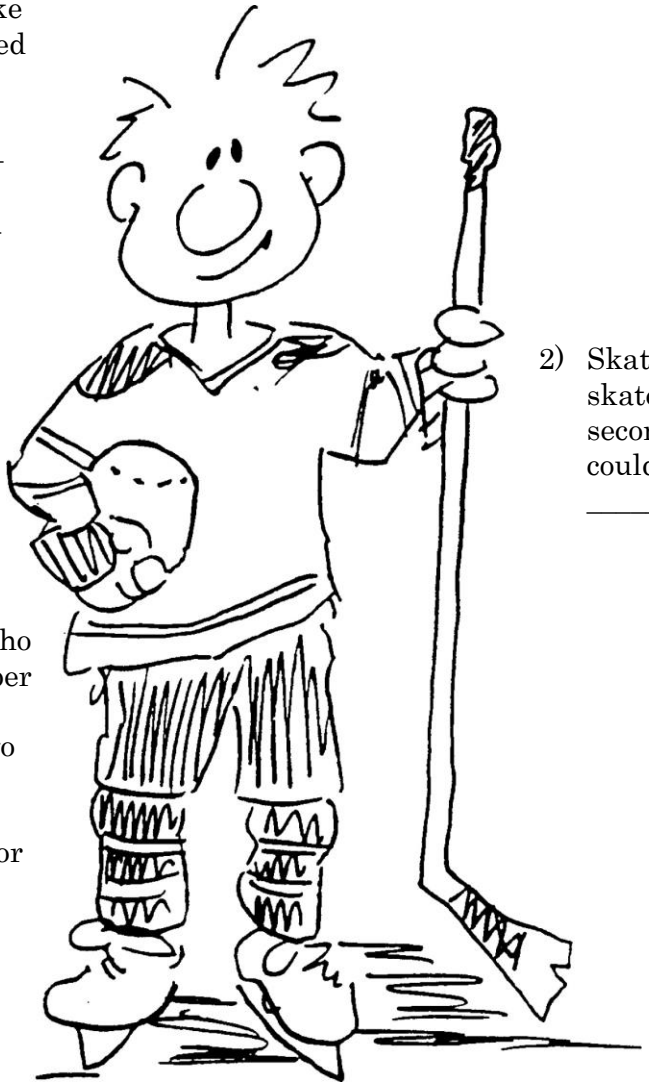
_____



The Mathematically Ideal Hockey Player

Classroom Activity:

1) Play aggressive hockey like Ralph Ruffian who received 3966 penalty minutes.
   a) How many days is that?_____
   b) Seconds?_____
   c) Hours?_____



2) Skate like Flash Fraser, who skated 13.3 metres per second. How many metres could he skate in 4 seconds?
   _____

3) Shoot like Billy Boomer, who could shoot 52.9 metres per second.
   a) How far would his shot go in 5 seconds?
      _____
   b) How long would it take for the puck to travel 25m?
      _____

4) Score like Sniper Smith, who averaged 2.230 points per game.
   a) How many points would he get (rounded to the nearest point) after 1376 games?
      _____
   b) How long would it take to score 1000 points?
      _____

Power Play

Classroom Activity:

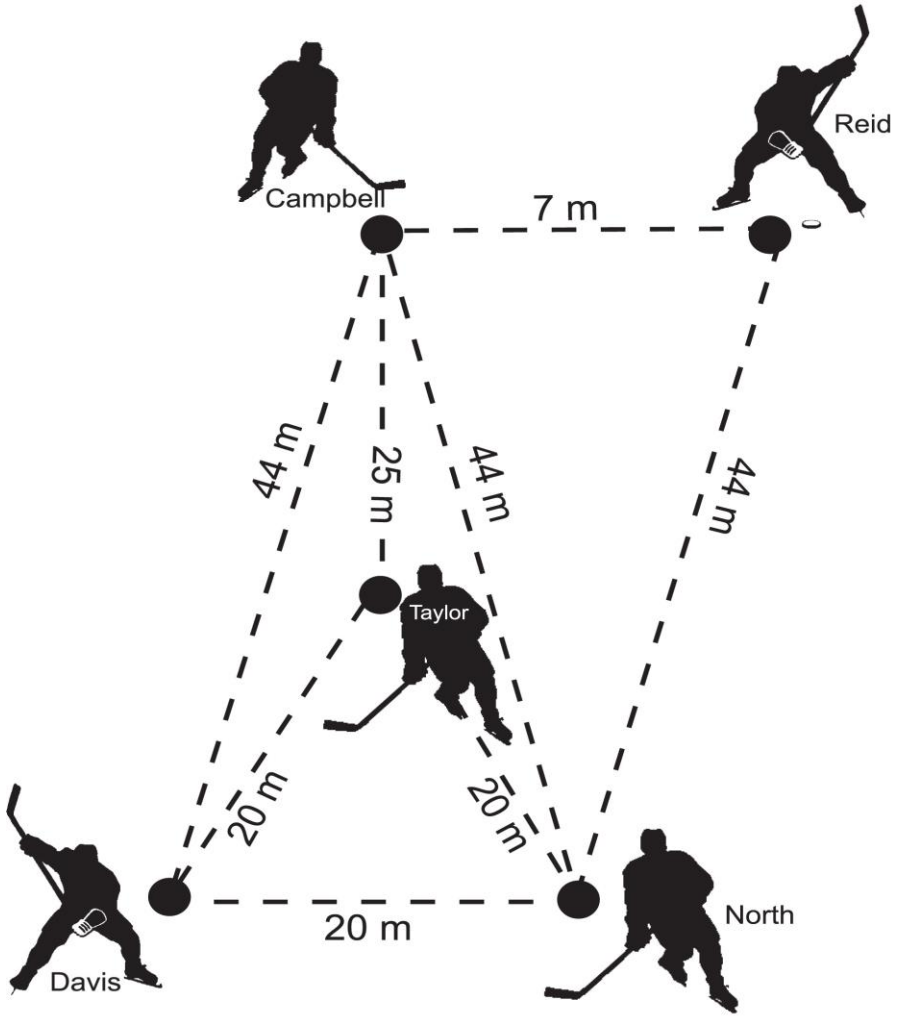
Which type of triangle (equilateral, isosceles, scalene) would describe the puck's path if it was passed from:

A) *Davis to Campbell to North*? _____

B) *Davis to Taylor to North*? _____

C) *Davis to Taylor to Campbell*? _____

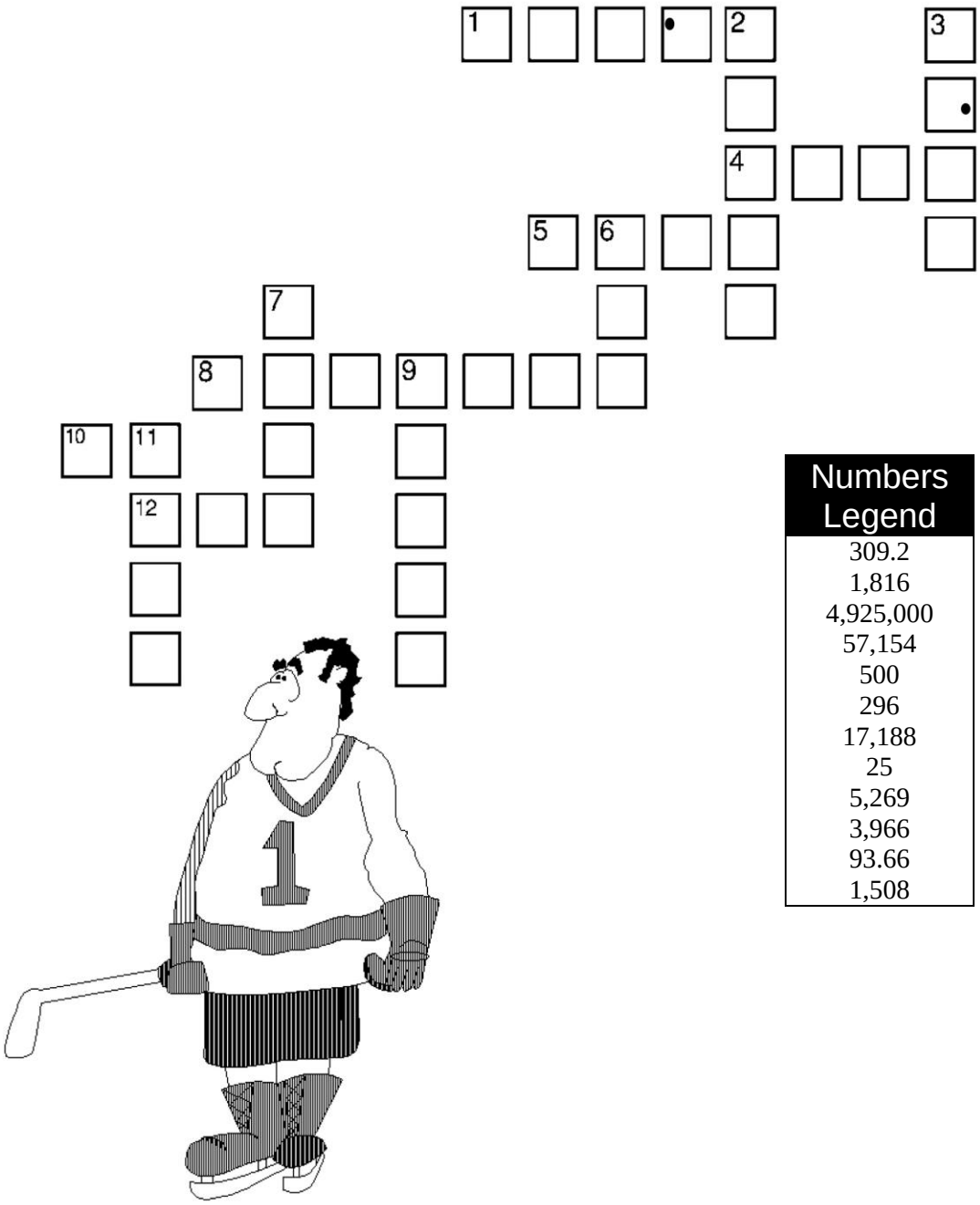
D) *Campbell to Reid to North*?_____



Crossword Puzzle

Classroom Activity:

Place the numbers found in the legend in their appropriate spot on the picture below.



Numbers Legend
309.2
1,816
4,925,000
57,154
500
296
17,188
25
5,269
3,966
93.66
1,508

Wayne Gretzky's Math Challenge

Classroom

Year	Club	Games Played	Goals	Assists	Points
79-80	EDM	79	51	86	137
80-81	EDM	80	55	109	164
81-82	EDM	80	92	120	212
82-83	EDM	80	71	125	196
83-84	EDM	74	87	118	205
84-85	EDM	80	73	135	208
85-86	EDM	80	52	163	215
86-87	EDM	79	62	121	183
87-88	EDM	64	40	109	149
88-89	LA	78	54	114	168
89-90	LA	73	40	102	142
90-91	LA	78	41	122	163
91-92	LA	74	31	90	121
92-93	LA	45	16	49	65
93-94	LA	81	38	92	130
94-95	LA	48	11	37	48
95-96	LA	62	15	66	81
95-96	STL	18	8	13	21
96-97	NYR	82	25	72	97
97-98	NYR	82	23	67	90
98-99	NYR	70	9	53	62
NHL TOTALS		***1487***	***894***	***1963***	***2857***

1. Which seasons represented the highest G, A and P? _____

2. In which seasons did he have:

   a) 60 or more goals? _____

   b) 120 or more assists? _____

   c) 180 or more points? _____

   d) less than 50 goals? _____

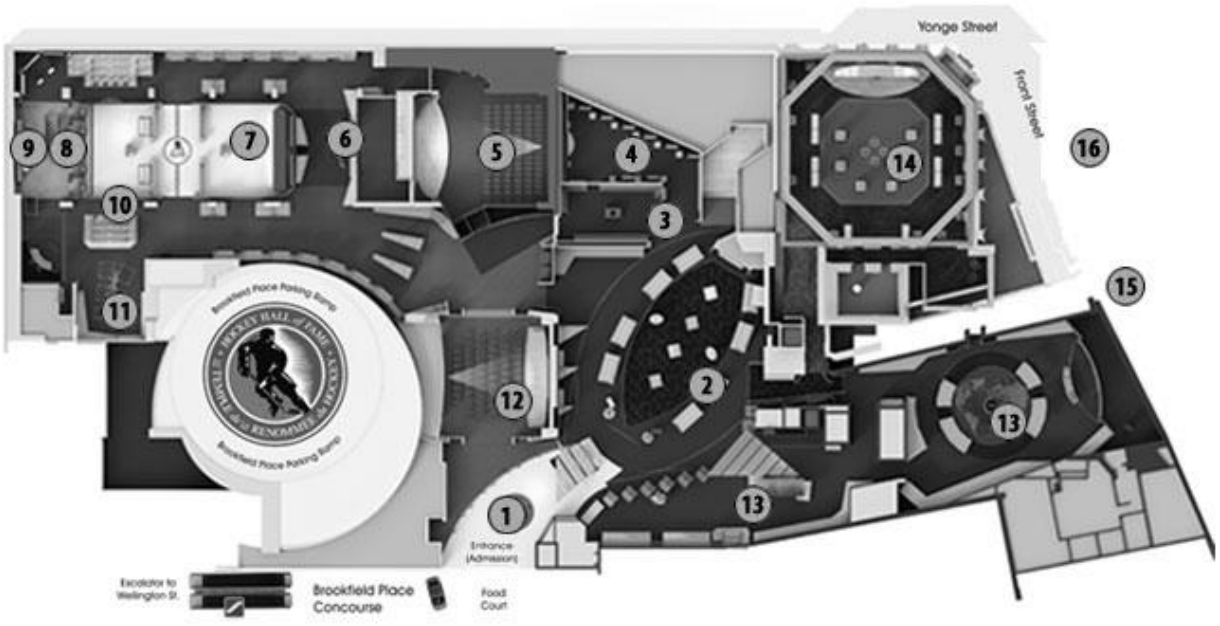
3. Find the average per season:

   Games Played: _____

   Goals: _____

GREAT MOMENTS GUIDE MAP

Floor plan of the Hockey Hall of Fame



1. Entrance Foyer Displays
2. Honda NHL Zone
3. Canadiens Dressing Room
4. Via Rail Stanley Cup Dynasties
5. TSN Theatre
6. Scotiabank Hometown Hockey
7. NHLPA Game Time
8. TSN/RDS Broadcast Zone
9. EA Sports NHL15 / PS4 Game Kiosks
10. Shoot for a Cure Slapshot Trivia
11. Upper Deck Collectors' Corner
12. Tim Hortons Theatre
13. Tissot World of Hockey
14. Esso Great Hall & NHL Trophies
15. Spirit of Hockey Retail Store
16. Exterior Sculptures

D.K. (Doc) Seaman Hockey Resource Centre